M. J. Meunier
with the Author's
kind regards

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DESCRIPTIVE LIST
OF THE
BRITISH ANTHOMYIDÆ.

BY

R. H. MEADE, F.R.C.S.

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In this list, which is supplementary to one which I published in the Entomologist's Monthly Magazine for 1881—83, I intend to revise the groups or Genera into which this Family has been divided, and to give a short diagnostic description of each species in English, so that the British student may have less difficulty than at present in determining the names of his specimens.

This large Family is distinguished from the other Calypterate *Muscidæ* by having the fourth longitudinal or præbrachial vein continued directly to the margin of the wing, instead of being bent at an angle or curve towards the third or cubital vein, as in the *Tachiniidæ* and *Muscinæ*.

The species may be known from the smaller *Muscidæ* by the greater development of the calyptra, as well as of other points of structure.

TABLE OF GENERA.

1	(42)	Eyes mostly contiguous or approximate in the male, and widely separated in the female.	
2	(20)	Calyptra large or moderate in size, the scales unequal.	
3	(18)	Anal vein long, but not reaching the margin of the wing.	
4	(5)	Fore femora of the male armed with teeth	5. HYDROTÆA, Dsv.
5	(4)	Fore femora unarmed.	
6		Arista plumose or pubescent.	
7	(10)	Eyes hairy.	
8	(9)	Facialia ciliated	1. POLIETES, Rnd.
9	(8)	Facialia bare	2. HYETODESIA, Mde.
10	(7)	Eyes nude.	
11	(14)	Hind tibiæ straight.	

12 (13) Abdomen mostly oval, and always unspotted ....3. MYDÆA, Dsv.
13 (12) Abdomen always spotted ....4. SPILOGASTER, Mcq.
14 (11) Hind tibiæ curved and ciliated...............................6. OPHYRA, Dsv.
15 (16) Hind tibiæ straight, proboscis with a movable apical joint... 7. DRYMEIA, Mgn.
16 (15) Proboscis without movable point, first longitudinal (auxillary) vein setigerous...8. ACANTHIPTERA, Rnd.
17 (16) Auxillary vein unarmed, sides of mouth bearded... 9. POGONOMYIA, Rnd.
18 (3) Anal vein prolonged to the margin of wing.
19 Arista plumose or subplumose......................10. HYDROPHORIA, Dsv.
20 (2) Calyptra small, scales equal or slightly unequal.
21 (28) Eyes nude.
22 (27) Arista plumose or pubescent.
23 (26) Eyes of male contiguous or subcontiguous.
24 (25) Body grey, marked or striped in the ordinary way... 11. HYLEMYIA, Dsv.
25 (24) Body white, marked with shining black spots and stripes... 12. EUSTALOMYIA, Kowz.
26 (23) Eyes widely separated in both sexes ....13. MYCOPHAGA, Rnd.
27 (22) Arista subpubescent or bare.
28 (21) (29) Eyes hairy or downy ....14. LASIOPS, Mgn.
29 (28) Eyes bare.
30 (31) Under scale of calyptra slightly longer than the upper one... 15. ANTHOMYIA, Mgn.
31 (30) Scales of calyptra equal in size.
32 (35) Legs black.
33 (34) Abdomen subcylindrical ....16. CHORTOPHILA, Mcq.
34 (33) Abdomen narrow and depressed ....17. PHORBIA, Dsv.
35 (32) Legs rufous or yellow, as well as the abdomen in most species... 18. PEGOMYIA, Mcq.
36 Anal vein short, and auxillary vein curved inwards.
37 (38) Arista plumose ....19. PIEZURA, Rnd.
38 (37) Arista pubescent or nude.
39 (40) (41) Abdomen ovoid or oblong ....20. HOMALOMYIA, Bouché.
40 (39) (41) Abdomen obovate or spatulate ....21. CÆLOMYIA, Hal.
41 (39) (40) Abdomen narrow, subcylindrical and mostly spotted...22. AZELIA, Dsv.
42 (1) Eyes always widely separated in both sexes.
43 (54) Calyptra of moderate size, with unequal scales.
44 (45) Palpi with dilated extremities ....23. LISPA, Latr.
45 (44) Palpi of the ordinary shape.
46 (47) Arista subplumose ....24. CARICEA, Dsv.
47 (46) Arista pubescent or bare.
48 (49) Abdomen of male narrow and subcylindrical, with projecting subanal appendages..25. MACHORCHIS, Rnd.
49 (48) Abdomen of male clubbed at the end, without projecting appendages.
50 (53) Inner transverse vein of wing opposite the end of the auxillary vein.
51 (52) Forehead and epistome prominent ....26. MELANOCHELIA, Rnd.
(voir Myopina

52 (51) Forehead and epistome flat ....27. CÆNOSIA, Mgn.
53 (50) Inner transverse vein opposite the end of the first branch of the first longitudinal vein of the wing ....28. ATHERIGONA, Rnd.
54 (43) Calyptra small with equal scales.
55 (56) Anal vein prolonged to the margin of the wing......29. CHIROSIA, Rnd.
56 (55) Anal vein short.
57 (58) Male with large subanal processes ....30. HOPLOGASTER, Rnd.
58 (57) Male without large subanal processes.
59 (60) Antennæ narrow ....31. CHELISIA, Rnd.
60 (59) Antennæ wide ....32. SCHÆNOMYZA, Hal.

Gen. I.—POLIETES, Rnd.

MACROSOMA, Dsv.

Gen. ch.—Eyes hairy; arista plumose; facialia ciliated; abdomen rounded; thoracic and abdominal bristles small and weak; calyptra large, with unequal scales; anal vein prolonged, but not reaching to the margin of the wing.

1 (4) Calyptra white.
2 (3) Thorax with four stripes ....1. *lardaria*, F.
3 (2) Thorax with two stripes..2. *albolineata*, Fln.
4 (1) Calyptra yellow ....3. *hirticrura*, Mde.

Sp. 1.—P. LARDARIA, F.

♂. Eyes contiguous; face white, with red reflections; antennæ black, with long haired arista; mouth prominent, with numerous long vibrissæ; facialia ciliated with soft hairs; palpi black; thorax wide, blue-black, and marked with four black stripes, having white spots between them in front; abdomen glaucous, tessellated with black spots or patches; calyptra large and white; halteres brown; wings hyaline, with the third and fourth longitudinal veins very divergent, and the outer cross veins very oblique and sinuous; legs black, with the hind tibiæ curved and ciliated on the outer sides with short spines, and on the inner surfaces with soft hairs.

♀. Eyes widely separated, in other respects like the ♂.

Length, 10—11 mm. Very common.

Sp. 2.—P. ALBOLINEATA, Fln.

This species is less than the preceding, also much brighter in colour, being a brilliant blue-black; it has two instead of four dorsal thoracic stripes, which are very wide, with a glistening white spot between them in front; the shoulders and sides of the thorax are also white; the abdomen is tessellated as in *P. lardaria*; the wings have the veins much less divergent, and the cross ones much less oblique; the legs also have the hind tibiæ less curved and less hairy than in that species.

♀ with wide frontalia, in other respects like the ♂.

Length, about 8 mm. Not uncommon.

This fly closely resembles *Morellia hortorum*, Fln.

Sp. 3.—P. HIRTICRURA, Mde.*

This species bears a considerable resemblance to both the preceding. The colour is steel-blue and very bright, like that of *P. albolineata*; the thorax is marked with four stripes, as in *P. lardaria*, but they are less distinct; the abdomen is darker than that of either of the above, and the white tessellations less distinct; the arista is very long and only plumose along its basal half, the long apex being nearly bare; the calyptra are orange coloured, as well as the bases of the wings, which have the longitudinal veins only a little divergent, and the outer cross veins nearly straight; the hind tibiæ are ciliated in the same manner as those of *P. lardaria*, but the hairs are much longer on the inner surfaces.

Length, 9 mm. Only the male is known of this rare species.

Gen. II.—HYETODESIA, Mde.

YETODESIA, Rnd.
TRICHOPTHICUS, Rnd.
LASIOPS, Mgn., p.
ALLOCOSSTYLUS, Schnabl.

Gen. ch.—Eyes hairy or downy; contiguous or approximate in the male; arista plumose, subplumose or pubescent; facialia bare or nearly so; calyptra variable in size, but with the scales always unequal; wings with anal vein not prolonged to the margin of the wing.

I shall include in this genus those species which were separated from the old genus *Lasiops* of Meigen by Rondani, and formed into that of *Trichopthicus*; for the latter was a very anamolous group, and only differed from that of *Hyetodesia* by having a shorter haired arista and rather smaller calyptra. It is impossible to draw an exact line, for some species with hairy eyes which have a large oval body and large calyptra possess a very short haired arista, while others with an elongated shape and much smaller scales have a plumose arista. This genus will now comprise all those Anthomids which have more or less hairy eyes, unequal sized scales, and a plumose, subplumose or tomentose arista.

1 (35) Legs black.
2 (14) Thorax distinctly striped.
3 (11) Arista long haired (plumose).
4 (5) Abdomen marked with a central dorsal line ....1. *incana*, Wdm.
5 (4) (8) Abdomen marked with well defined dorso-lateral spots.
6 (7) Spots rounded; wings with outer cross veins sinuous and clouded... 2. *lucorum*, Fln.
7 (6) Spots angular; cross veins only slightly clouded ...3. *obscurata*, Mgn.

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* Ent. Mo. Mag., January, 1887.

8 (4) Abdomen marked with indefinite spots and tessellations.
9 (10) Thorax with three post-sutural dorso-central bristles ...4. *serva*, Mgn.
10 (9) Thorax with four post-sutural dorso-central bristles...5. *marmorata*, Ztt.
11 (3) Arista with rather short hairs (subplumose).
12 (13) Abdomen marked with subquadrangular spots ; wings nigrescent... 6. *dispar*, Fln.
13 (12) Abdomen tessellated ; wings clear ....7. *Goberti*, Mik.
14 (2) Thorax indistinctly striped or unstriped.
15 (22) Arista long haired.
16 (19) Abdomen oval or suboval.
17 (18) Abdomen tessellated ; epistome prominent ....8. *lugubris*, Mgn.
18 (17) Abdomen with only a dorsal stripe ; epistome flat...9. *umbratica*, Mgn.
19 (16) Abdomen oblongo-conical.
20 (21) Hind femora elongated, abodmen with central dorsal stripe... 10. *longipes*, Ztt.
21 (20) Hind femora of ordinary length, abdomen immaculate... 11. *variabilis*, Fln.
22 (15) Arista pubescent or almost bare
23 (32) Abdomen black or grey.
24 (31) Epistome slightly prominent, or flat.
25 (30) Halteres black or brown.
26 (27) Hind tibiæ with inner sides bare ....12. *cunctans*, Mgn.
27 (26) Hind tibiæ thickly clothed with hairs on both sides.
28 (29) Hind tibiæ with a long blunt spur at the end ....13. *hirsutula*, Ztt.
29 (28) Hind tibiæ without spurs ....14. *innocua*, Ztt.
30 (25) Halteres yellow..15. *pulchra*, Mde.
31 (24) Epistome with projecting beak ....16. *rostrata*, Mde.
32 (23) Abdomen yellow.
33 (34) Abdomen nigrescent at the hinder part, arista with base subplumose... 17. *semicinerea*, Mgn.
34 (33) Abdomen with transverse black lines, arista shortly pubescent... 18. *semipellucida*, Ztt.
35 (1) Legs partly pale (flavous or rufous).
36(60)(64) Thorax and abdomen black or grey.
37 (59) Arista with long hairs.
38(43)(44) Abdomen with a central row of triangular spots on the dorsum.
39 (42) Tibiæ only testaceous.
40 (41) Thorax with four dorso-central post-sutural bristles ......19. *læta*, Fln.
41 (40) Thorax with three post-sutural bristles ....20. *trigonalis*, Mgn.
42 (39) Posterior femora as well as tibiæ pale ....21. *fuscata*, Fln.
43 (38) Abdomen with wide interrupted dorsal stripe ....22. *perdita*, Mgn.
44(38)(45) Abdomen with four lateral angular spots ......23. *quadrinotata*, Mgn.
45 (44) Abdomen tessellated with undefined spots and reflections.
46 (51) Scutellum partly rufous.
47 (50) Antennæ with basal joints pale.
48 (49) Femora and tibiæ all pale.................................24. *erratica*, Fln.
49 (48) Fore femora nigrescent.......................................25. *signata*, Mgn.
50 (47) Antennæ entirely black ....26. *errans*, Mgn.

51 (46) Scutellum quite black or grey.
52 (58*a*) Abdomen with a central dorsal stripe only.
53 (58) Palpi black.
54 (57) Thorax with black stripes.
55 (56) Eyes of male contiguous; femora and tibiæ all pale ...27. *basalis*, Ztt.
56 (55) Eyes of male subcontiguous; fore femora partly nigrescent... 28. *vagans*, Fln.
57 (54) Thorax unstriped ....29. *boleticola*, Rnd.
58 (53) Palpi pale ....30. *rufipalpis*, Mcq.
58*a* (52) Abdomen spotted.
59 (37) Arista short haired ....31. *lasiophthalma*, Mcq.
60 (36) Abdomen wholly or partly pale.
61 Arista plumose.
62 (63) Humeri and scutellum yellow ....32. *scutellaris*, Fln.
63 (62) Humeri grey; scutellum yellow at apex only ......33. *variegata*, Mgn.
64 (36) Thorax as well as abdomen pale.
65(66)(69) Arista with long hairs ....34. *pallida*, F.
66 (65) Arista with shortish hairs.
67 (68) Abdomen spotted ....35. *abdominalis*, Ztt.
68 (67) Abdomen unspotted, posterior segments nigrescent...36. *simplex*, Wdm.
69(65)(66) Arista pubescent.
70 (71) Thorax striped, fore femora nigrescent ....37. *sudeticus*, Schnabl.
71 (70) Thorax plain, all femora pale ....38. *flaveola*, Fln.

Sp. 1.—H. INCANA, Wdm.
indecisa, Wlk.

Oblong-oval, grey, with antennæ, palpi, and legs black. ♂. Eyes approximate, hairy; arista plumose; thorax with four black stripes; abdomen grey, with a single, central, longitudinal stripe; calyptra yellow with darker margins; halteres yellow; wings with yellow bases and unclouded veins. ♀. Very similar to the ♂, but has the eyes widely separated. Length, 8—9 mm. Not uncommon.

Sp. 2.—H. LUCORUM, Fln.

In shape and colour similar to *H. incana*. ♂. Eyes closely adherent, hairy; arista with long hairs; thorax light grey with four distinct stripes; abdomen grey and glistening, and marked with four large rounded spots; calyptra grey; halteres yellow; wings with the cross veins clouded, and the outer ones very sinuous; hind tibiæ with a few soft hairs in the middle of their inner surfaces. ♀. Eyes separated, and abdominal spots undefined. Length, 8 mm. Very common.

Sp. 3.—H. OBSCURATA, Mgn.

♂. Eyes approximate, and rather short haired; antennæ long and narrow, with a very long arista, feathered nearly to the end; thorax with four narrow stripes; abdomen conical, with six subtriangular spots; calyptra pale yellow, with darker edges; halteres yellow; wings with outer cross veins slightly nebulous, and some-

what sinuous; legs with hind tibiæ furnished with a few hairs on their hinder surfaces towards the upper part, besides the ordinary scattered bristles on their outer sides. ♀. Eyes wide apart; abdomen marked with faint and indistinct spots. The male is very similar to that of *Myospila meditabunda*, F., except by the venation of the wings. Length, 6—7 mm. Not common.

Sp. 4.—H. serva, Mgn.

This species is very similar in general structure and appearance to *H. lucorum*, but is darker in colour, and has the abdomen marbled or tessellated with dark patches instead of being marked with well defined spots; the wings have the outer cross veins nearly straight and clear, and not sinuous or clouded, as in *H. lucorum*; it also differs from this, as well as most of the other species, by having only three post-sutural dorso-central thoracic bristles instead of four.*

Length, 7—8 mm. Not common.

Sp. 5.—H. marmorata, Ztt.

This species closely resembles the former, but differs by being a little larger; by having the eyes in the male subcontiguous instead of contiguous; by the antennæ being rather longer, with a much longer arista feathered to the end; by the different number of the post-sutural thoracic bristles; by the outer cross veins being somewhat sinuous, and a little clouded; and by the hind tibiæ of the males being ciliated by a few soft hairs along the lower two-thirds of their inner, or rather hinder, surfaces. Length, 9—10 mm. Not common.

Sp. 6.—H. dispar, Fln.
nivalis, Ztt.

♂. Eyes short haired, approximate; arista subplumose; thorax black, indistinctly striped, and with three post-sutural dorso-central bristles; abdomen conical, grey, with four large quadrangular spots; calyptra subfuscous; halteres yellow; wings nigrescent; legs with the hind tibiæ bearded in the middle of their inner surfaces. ♀. Wings clear; abdomen with faint brown spots; eyes widely separated and almost bare. Length, 6—7 mm. Rare.

Sp. 7.—H. Goberti, Mik.
dubia, Mde.†

♂. Eyes contiguous, long-haired; antennæ of moderate length, with a long short-haired arista; thorax light ash-grey, with four distinct black stripes; abdomen grey, with a central longitudinal stripe, and marbled with irregular spots or patches; calyptra white; halteres yellow; wings clear, outer transverse veins slightly oblique and rather sinuous; legs with hind tibiæ with a few setæ of different lengths upon their outer sides. ♀ unknown to me. Length, 7—8 mm. Rare.

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* As the greater number of species of *Hyetodesia* have four of these bristles, I shall only mention them when there are but three.

† Ent. Mo. Mag., June, 1881.

Sp. 8.—H. LUGUBRIS, Mgn.

♂. Eyes subcontiguous and long-haired; antennæ rather short, with plumose arista; mouth very prominent, like a short snout; vibrissæ long and numerous, the setæ extending some way up the facialia; thorax black and shining, with only the commencement of four longitudinal stripes; post-sutural dorso-central bristles three in number; abdomen black-brown, and shining, with rather indistinct tessellations; calyptra and halteres yellow; wings with nigrescent bases, and outer cross veins slightly sinuous; legs with hind tibiæ bare, with the exception of the few usual bristles on their outer or anterior surfaces. ♀. Thorax grey, with four distinct stripes; abdomen much lighter than in the male. Length, about 8 mm. Rare.

Sp. 9.—H. UMBRATICÆ, Mgn.
carbo ?, Schr.

♂. Eyes coherent; arista plumose; epistome flat; thorax shining black, immaculate; abdomen subovate, gleaming ash-grey, with a medio-dorsal black stripe; calpytra and halteres fuscous; wings somewhat nigrescent; legs with few hairs or bristles. ♀ similar to ♂, but rather paler in colour; abdomen unstriped and wings clear; eyes nearly nude, and separated by a moderate interval.

Length, 4—5 mm. Common.

Sp. 10.—H. LONGIPES, Ztt.

♂. Eyes subcoherent, thickly haired; arista long-haired; thorax bright black, indistinctly striped; shoulders with a white gleam; abdomen oblong, yellowish-grey with a white shine, and a central dorsal stripe; calyptra and halteres yellow; wings tinged with brown; legs hairy, with the hind femora longer than the abdomen, and bearded on their inner sides with a tuft of long soft hairs. ♀. Eyes separated and nearly bare; thorax dark grey, with four black stripes; wings clear.

Length, 8—9 mm. Not common.

Sp. 11.—H. VARIABILIS, Fln.

This species closely resembles the former, but differs by being rather smaller, having the abdomen of an ash-grey colour and unstriped; the wings yellow at the base; the legs less hairy, with the hind femora not longer than the abdomen, and the hind tibiæ with a much shorter beard.

Length, 7—8 mm. Local; very common in the Lake district.

Sp. 12.—H. CUNCTANS, Mgn.
decolor ?, Fln., ♀.

♂. Eyes contiguous, long-haired; arista shortly pubescent (subnuda); thorax shining black, indistinctly striped; abdomen dark grey, of a glistening whitish tint, when viewed from behind,* with a dark dorsal stripe; calyptra flavescent, halteres black; wings brown, with outer cross veins straight; legs with few bristles, but with

* This glistening or gleaming appearance of the abdomen is common to this and the three following allied species.

hind tibiæ ciliated along the whole of their outer sides with short hairs of even lengths. ♀. Eyes widely separated and almost bare; thorax and abdomen of a dull grey colour, the former being marked with four distinct stripes, the latter is immaculate. Length, 6—7 mm. Not common; rather local.

Sp. 13.—H. HIRSUTULA, Ztt.

This species is more oblong in form than the former; the eyes of ♂ are subcontiguous; the antennæ rather long, with a pubescent (almost subplumose) arista; thorax shining black, with grey shoulders; abdomen dark grey with lighter reflections, and central dorsal stripe; calyptra yellowish-white, halteres black; wings nigrescent; legs hairy, hind tibiæ villose on both sides, and armed with a blunt spine or spur at the inner extremity; middle femora with a row of long spines on their under surfaces. Length, 7 mm. Not common.

Sp. 14.—H. INNOCUA, Ztt.

Very similar to *H. hirsutula*, but has the eyes in ♂ more closely contiguous; the abdomen of a whiter grey; the dorsal stripe rather wider; and the legs without the spur at the end of the hind tibiæ. The females of this and the former differ from the males by being grey instead of black, by having the abdomen unstriped, and the halteres yellow. Length, 6 mm. Not common.

Sp. 15.—H. PULCHRA, Mde.*

This small species is also very similar to the two preceding ones, but is less in size, has the halteres yellow instead of black, and the legs with fewer hairs and bristles; the hind tibiæ being almost bare; the abdomen has a glaucous tinge. ♀ rather smaller than male; thorax and abdomen brownish-grey and immaculate; wings clear. Length, 3—4 mm. Not uncommon.

Sp. 16.—H. ROSTRATA, Mde.†

♂. Eyes contiguous, long-haired; antennæ short, arista subpubescent; epistome very prominent in the form of a snout; thorax black with grey tomentum, shoulders grey, no stripes; abdomen grey, basal and second segments somewhat rufous and translucent in a strong light; when viewed from before, a series of semi-lunar brown spots appear on the sides of the dorsum, while, when it is looked at from behind, the whole surface is of a glaucous-white glistening colour, with a series of triangular spots down the middle; calyptra white; halteres black; wings clear; legs with hind tibiæ curved, shortly ciliated along their outer sides, but bare internally, with the exception of a sharp spur a little before the apex. ♀ unknown.
Length, 6 mm. Very rare.

Sp. 17.—H. SEMICINEREA, Wdm.
Lasiops apicalis, Mgn.

♂. Eyes coherent, short-haired; antennæ rather long, with the arista pubescent and almost subplumose near the base; thorax nigrescent, glabrous, and substriated

* Ent. Mo. Mag., January, 1882, p. 175. † Ent. Mo. Mag., January, 1882, p. 176.

with grey shoulders; abdomen pale yellow, translucent, with apex black, and a narrow dorsal line; calyptra dull white; halteres yellow; wings clear; legs black; hind tibiæ ciliated on both sides with long hairs. ♀. Eyes nude; thorax grey; abdomen dull yellow immaculate, or with slight transverse striæ.

Length, 3—4 mm. Not uncommon.

Sp. 18.—H. semipellucidæ, Ztt.

This species has often been confounded with the former, but it differs by having the arista only shortly pubescent (subnuda) instead of subplumose; the thorax black and dull, and without the grey shoulders; the abdomen ochreous, and marked by transverse black striæ, as well as by a median line; the wings nigrescent, and the legs, which are shorter than those in *H. semicinerea*, almost without hairs on the hind tibiæ, which are sometimes piceous or testaceous.

Length, about 4 mm. Not common.

Sp. 19.—H. læta, Fln.

♂. Eyes approximate, short-haired; antennæ rather long, with plumose arista; palpi black; thorax light grey with four dark stripes, the two middle ones narrow and shortened, the outer ones wide and interrupted; abdomen pale grey, with brown undulating patches on the sides, and a series of four triangular spots in a line down the centre; scutellum grey, with a dark spot at the base; calyptra white; halteres yellow; wings clear, with nebulous cross veins; legs black, with testaceous tibiæ. ♀ similar to ♂, except by broad frontalia. Length, 7 mm. Rare.

Sp. 20.—H. trigonalis, Mgn.

This species bears a considerable resemblance to *H. læta*, but differs by having the eyes in the ♂ contiguous; by there being only three instead of four post-sutural dorso-thoracic bristles; by the scutellum having two lateral dark spots instead of one at the base; by the abdomen being without the lateral marks, and by the tibiæ being lighter in colour. Length, 7 mm. Not uncommon.

Sp. 21.—H. fuscata, Fln.

This species is rather aberrant; it was placed by Meigen and others together with *H. trigonalis* in the genus *Spilogaster*; the latter, however, has decidedly pubescent eyes, and those of the former, when carefully examined, will show the presence of some hairs. Both species are allied by the design upon the abdomen to *H. læta*, and, though in the genus *Spilogaster* the abdomen is spotted, the spots are bilateral and rounded or angular, and do not form a central dorsal line; both these species, therefore, should be placed in the genus *Hyetodesia*, as at present defined.

H. fuscata is of a light grey colour, the eyes in ♂ are approximate; arista plumose; palpi black; thorax with four dark stripes, and three post-sutural bristles; scutellum grey, with a dark mark at the base; abdomen light grey, with a row of central triangular spots down the back; calyptra white; halteres yellow; wings clear, with clouded cross veins; legs ferruginous, with black fore femora and tarsi. ♀ is paler in colour, and indistinctly marked. Length, 8 mm. Rare.

Sp. 22.—H. PERDITA, Mgn.

♂. Eyes approximate, with longish hairs; antennæ black, with plumose arista; palpi black; thorax pale grey, with four stripes; scutellum grey, with the margin sometimes rufous; abdomen light grey, with a wide interrupted dorsal stripe; calyptra dirty white; halteres yellow; wings clear, with cross veins slightly clouded; legs with femora and tarsi black, and knees and tibiæ rufous. ♀. Eyes tender-haired; posterior femora sometimes rufous. Length, 8—9 mm. Not common.

Sp. 23.—H. QUADRINOTATA, Mgn.

♂. Eyes subcontiguous, long-haired; antennæ with the two basal joints pale; arista long-haired; thorax ash-grey, with four stripes; scutellum grey; abdomen marbled with brown, and having four subtriangular lateral spots, two on the second and two on the third segments; calyptra white; halteres yellow; legs with all the femora and tibiæ rufous, and the tarsi black. ♀. Eyes short-haired; abdominal spots indistinct. Length, 8 mm. Rare.

Sp. 24.—H. ERRATICA, Fln.

This is about the largest, and is sometimes looked upon as the typical species in the genus. ♂. Eyes coherent, thickly haired; antennæ long, with first, second, and base of third joints rufous; arista long-haired; epistome tinged with red; palpi black; thorax yellow-grey, with four dark stripes; scutellum testaceous, with dark base; abdomen yellowish-grey, wide, oval, setose, and marbled with irregular brown spots and patches; calyptra subfuscous; halteres pale; wings subflavous, with the third and fourth longitudinal veins curved and divergent, and the outer cross ones very oblique and sinuous; legs with femora and tibiæ rufous, and tarsi black. ♀ similar to ♂, with the exception of the widely separated and shorter haired eyes. Length, 10—11 mm. Not very common.

Sp. 25.—H. SIGNATA, Mgn.

♂. Eyes coherent and long-haired; antennæ with first and second joints testaceous; arista plumose; mouth and cheeks tinged with red; palpi black; thorax yellowish-grey, with four black stripes; scutellum grey, with red apex; abdomen marbled with brown, and having an interrupted dorsal stripe; calyptra and halteres yellow; wings with outer cross veins sinuous and clouded; legs with the four posterior femora and all the tibiæ rufous, and the bases of the fore femora and the tarsi black. ♀ very similar to the ♂, except by the broad frontalia. Length, 8 mm. Common.

Sp. 26.—H. ERRANS, Mgn.

♂. Eyes subcoherent, with long hairs; antennæ quite grey or black, with long-haired arista; palpi black; thorax grey, with four stripes; scutellum grey, with red apex; abdomen grey, tessellated or marbled with brown spots or patches; calyptra and halteres yellow; wings clear, with the outer cross veins sinuous and clouded; legs with the fore femora and tarsi black, the other femora and all the tibiæ fulvous. ♀ very similar to ♂, except by the wider separated eyes. Length, 8—9 m.m.

This common species very closely resembles *H. erratica*, but is smaller, less flavescent, and has the antennæ with the fore femora black.

Sp. 27.—H. basalis, Ztt.

♂. Eyes coherent and long-haired; antennæ black, with long-haired arista; palpi black; thorax yellowish-grey, with four stripes; scutellum grey; abdomen oval, yellow-grey, with a narrow longitudinal dorsal stripe; calyptra and halteres yellow; wings hyaline, with base yellow, and outer transverse veins sinuous and a little nebulous; legs ferruginous, with the exception of the tarsi, which are black. ♀. Eyes widely separated and pubescent. Length, 8 mm. Common.

Sp. 28.—H. vagans, Fln.

A good deal of doubt has existed respecting this species, it being very rare, and having been confounded with *H. basalis*, there is no doubt, however, that they are distinct, though nearly related. *H. vagans* is larger than *H. basalis*, less flavescent in colour, has the eyes in the male less coherent, and shorter haired; the fore femora more or less nigrescent, and the abdomen with some dark tessellations or marks besides the longitudinal stripe, which is wider than in *H. basalis*. ♀ very similar to the ♂, but has widely separated eyes, and pale fore femora.

Meigen says that this species is very rare in Germany. I received a pair of typical specimens from M. Schnabl, of Warsaw, but have not seen an English one. I include it in the British list because it has been recorded as a native by Walker and others.

Sp. 29.—H. boleticola, Rnd.

♂. Eyes subcoherent and short-haired; frontal stripe in front testaceous; antennæ black, with arista long-haired; palpi black; thorax brown, covered with grey tomentum; scutellum grey, with a yellow tinge; abdomen yellowish-grey, marked by a fine longitudinal line; calyptra and halteres pale yellow; wings slightly flavescent at the base and along the costa, with outer cross veins sinuous but unclouded; legs with the posterior femora and tibiæ testaceous, and fore femora at the base with the tarsi black. ♀. Eyes subnude, wide frontal stripe in front rufous; fore femora pale, like the others. I have not seen this species, but Mr. Verrall has recorded it as British; he captured it at Arran.

Sp. 30.—H. rufipalpis, Mcq.

♂. Eyes coherent, rather short-haired; antennæ long, with first and second joints rufous; arista long-haired; palpi yellow; thorax dark grey, with four black stripes, the central pair narrow; scutellum grey; abdomen grey and glistening, with a narrow central dorsal stripe; calyptra and halteres yellow; wings sublimpid, with outer cross veins sinuous, and a little clouded; legs, with the exception of the tarsi, testaceous. ♀ resembles the ♂, with the exception of wider separated, and shorter haired, eyes. Length, 7 mm. Not uncommon.

Sp. 31.—H. LASIOPHTHALMA, Mcq.

♂. Eyes coherent, with long hairs; antennæ long and black, with pubescent arista; thorax shining, dark grey, with four longitudinal stripes; scutellum grey, with dark patches on sides; abdomen oval, grey, with four or six round lateral spots, those on the second segment larger than the others; calyptra and halteres yellow; legs testaceous, with the exception of the tarsi and sometimes the bases of the fore femora, which are black. ♀ has the eyes wide apart, and short-haired, and the abdominal spots faint or indistinct. Length, 6 mm. Common.

Sp. 32.—H. SCUTELLARIS, Fln.
populi, Mgn.

♂. Eyes contiguous, thickly haired; antennæ long, with the two first joints rufous; arista long-haired; palpi testaceous; thorax black, covered with grey tomentum, and marked with four black stripes; shoulder points and scutellum yellow; abdomen yellow, marked with narrow, transverse, black lines, but without a central dorsal line, except a very short one at the base; calyptra and halteres yellow; wings hyaline, with nearly straight outer cross veins; legs testaceous, with black tarsi. ♀ very similar to ♂. Length, 8 mm. Very common.

Sp. 33.—H. VARIEGATA, Mgn.

This species closely resembles the former, and is often confounded with it; both species vary considerably; and the females are difficult to discriminate. In *H. variegata* the antennæ are quite black; the shoulders are without the yellow spot; the scutellum is only partially pale; the abdomen is marked with a central dorsal black stripe, which usually becomes wider towards the apex, which is also generally black; there are no transverse black lines. Very rare.

Sp. 34.—H. PALLIDA, F.
Musca testacea, Deg.

This species is entirely yellow or testaceous, with the exception of the black tarsi. ♂. Eyes contiguous, thickly haired; antennæ moderate in length, with long-haired arista; thorax with white reflections or shine on its front part; abdomen oval, diaphonous, showing a white rime when looked at from behind; wings tinged with yellow, having outer cross veins sinuous. ♀ has the eyes subnude.
Length, 6—7 mm. Common.

Sp. 35.—H. ABDOMINALIS, Ztt.

♂. Eyes contiguous, thickly haired; antennæ with first and second joints rufous, and arista subplumose; palpi testaceous; thorax grey, with four black stripes the outer ones short and indistinct; scutellum grey, with apex yellow; abdomen oval, yellow, pellucid at the base, marked with four (sometimes six) dark, rather indistinct, angular spots, and having apex nigrescent; wings with cross veins nebulous; calyptra and halteres yellow; legs, except the tarsi, yellow. ♀ frontalia wide and grey, with a bifid black mark in front; abdomen rufo-testaceous, indistinctly spotted. Length, 5 mm. Rare.

Sp. 36.—H. SIMPLEX, Wdm.
posticata, ♂, Mgn. et Ztt.

♂. Eyes coherent, with short hairs; antennæ with first, second, and base of third joints rufous, and arista subplumose; palpi yellow; thorax light grey, with four black stripes, the outer ones interrupted and maculiform; shoulder points yellow; post-sutural dorso-central setæ three in number; scutellum light grey; abdomen with the first and second segments yellow and translucent, marked with a centro-dorsal stripe dilating posteriorly into a wide triangular mark, where it joins the third segment, which, together with the fourth, is grey or nigrescent; calyptra and halteres pale; wings hyaline, with straight cross veins; legs, with the exception of tarsi, pale. ♀. Eyes with moderately wide frontalia, rufous in front; abdomen with only the first segment luteous, the other grey or nigrescent, with a longitudinal dorsal stripe, and transverse dark marks. Length, 8 mm. Not common.

Sp. 37.—H. SUDETICA, Schnabl.

♂. Eyes contiguous, downy; antennæ grey, with pubescent arista; thorax grey, with shoulder points yellow, and four black stripes, the central ones being fine, and the outer interrupted and maculiform; scutellum grey; abdomen grey, with a long, narrow, central stripe, and a few subdistinct dark reflections; calyptra and halteres yellow; legs testaceous, with black tarsi, and grey fore femora; hind tibiæ with a blunt spine at the apex, formed by two bristles joined together into a fasciculus. ♀ closely resembles the ♂, except by its broad frontalia.
Length, about 6 mm. Very rare.

Sp. 38.—H. FLAVEOLA, Fln.
diaphana, Wdm., Mgn.
varians, Ztt.
aculeata, Lw.

♂. Eyes contiguous, subpubescent; antennæ grey, with basal joints rufous; arista shortly ciliated; thorax, with scutellum, testaceous and glabrous, with the spur of a glistening white central stripe in the middle of the front margin; abdomen pale yellow, with nigrescent apex, oval and translucent; calyptra and halteres pale; wings with outer cross veins rather oblique and sinuous; legs pale, except the tarsi; hind tibiæ with a long spur at the apex on the inner side. ♀ similar to ♂, except by the wider separation of the eyes. Length, 8—9 mm. Not uncommon.

Gen. III.—MYDÆA, Dsv.
SPILOGASTER, *p. auct.*

Gen. ch.—Eyes bare, contiguous or approximate in the male; arista plumose, calyptra well developed with scales unequal; abdomen unspotted; anal vein not prolonged to the margin of the wing.

The species in this genus differ from those in *Hyetodesia* by having the eyes bare, and from those in *Spilogaster* by the bodies being unspotted.

1	(6)	Legs wholly black.	
2	(5)	Arista with long hairs.	
3	(4)	Colour grey	1. *Allotalla*, Mgn.
4	(3)	Colour black	2. *vespertina*, Fln.
5	(2)	Arista with short hairs	3. *nigritella*, Ztt.
6	(1)	Legs partly pale.	
7	(8)	Thorax black	4. *nigricola*, Fln.
8	(7)	Thorax grey.	
9	(18)	Thorax striped.	
10	(13)	Scutellum yellow.	
11	(12)	Scutellum quite yellow, as well as all the femora	5. *pagana*, F.
12	(11)	Bases of the scutellum, as well as those of the fore femora, black...	6. *tincta*, Ztt.
13	(10)	Scutellum grey.	
14	(17)	Fore femora partly nigrescent.	
15	(16)	Tarsi of ordinary length, and third abdominal segment without discal setæ	7. *urbana*, Mgn.
16	(15)	Tarsi very long, and third abdominal segment with numerous discal setæ	8. *longitarsis*, s. n.
17	(14)	Femora all pale	9. *affinis*, Mde.
18	(9)	Thorax unstriped.	
19	(20)	Palpi yellow	10. *impuncta*, Fln.
20	(19)	Palpi black	11. *separata*, Mgn.

Sp. 1.—M. Allotalla, Mgn.
bisignata, Ztt.

♂. Eyes approximate, bare; antennæ and palpi black; arista plumose; thorax grey, with four shining black stripes, and three dorso-central post-sutural bristles; scutellum grey; calyptra and halteres pale; abdomen oblongo-conical, grey, covered with short black hairs, and having long bristles upon the sides and two last segments; marked also in some specimens with two rather indistinct brown spots, placed near together upon the second segment; wings tinged with yellow, the third and fourth longitudinal veins being divergent at their extremities, the cross veins rather near together, and the outer one sinuous; legs black. ♀ very similar to the ♂, but having the eyes widely separated. Length, 8 mm. Not common.

Sp. 2.—M. vespertina, Fln.

This little black species strongly resembles *H. umbratica*, but has bare instead of hairy eyes. ♂ has eyes contiguous; arista with long hairs; palpi black; thorax shining black; calyptra and halteres pale; abdomen black with grey reflections, and a narrow dorsal stripe; wings nigrescent; legs black. ♀. Thorax grey with four indistinct stripes; wings nearly clear; eyes wide apart.

Length, 4—5 mm. Common.

Sp. 3.—M. nigritella, Ztt.

This closely resembles *M. vespertina*, but has the halteres dark, the arista with

shorter hairs; the wings less nigrescent; the hind tibiæ a little bent, rather pubescent, and armed at the apex with a long blunt spur or spine. Zetterstedt says that this species sometimes has pubescent eyes (I cannot find the hairs, however), if so, it should be placed in the genus *Hyetodesia*, next to *H. hirsutula*.

Length, 4 mm. Not common.

Sp. 4.—M. NIGRICOLOR, Fln.

This species is also much like the two preceding ones, but is rather larger, and has the posterior femora and the tibiæ yellow. The antennæ and palpi are black; the arista has long hairs; the thorax is shining black; the abdomen has an æneous tinge with grey reflections, and an indistinct dorsal stripe; the calyptra and halteres are pale, and the wings brunescent. Length, 5—6 mm. Rare.

Sp. 5.—M. PAGANA, F.

♂. Eyes bare, closely coherent; antennæ and palpi black; arista with long hairs; thorax light yellowish-grey, with four shining black stripes; scutellum entirely yellow; abdomen light grey, with a central narrow dorsal stripe; calyptra and halteres yellow; wings yellow at the base, veins unclouded; legs yellow, with the exception of the tarsi. ♀ very similar to the ♂, except by the wide frontalia.

Length, 9 mm. Common.

Sp. 6.—M. TINCTA, Ztt.
angelicæ ?, Mgn.

This species resembles *M. pagana*, but is rather less, more oblong in form, of a darker colour, and has the bases of the scutellum and of the fore femora nigrescent. The eyes are subcoherent in ♂, the antennæ black, with plumose arista; the thorax grey, with four stripes; the scutellum yellow, with dark base; abdomen dark grey, with narrow longitudinal stripe; calyptra and halteres yellow; legs yellow, with the exception of the tarsi and base of fore femora. ♀ has eyes widely separated, and fore femora often quite yellow. Length, 8 mm. Not uncommon.

Sp. 7.—M. URBANA, Mgn.
angelicæ ?, Fln., Ztt., Schr. (not Rnd.)

♂. Eyes bare, subcoherent; antennæ and palpi black; arista plumose; thorax grey, with four black stripes; scutellum grey; abdomen grey, with a slender dorsal stripe; third segment without discal setæ; calyptra and halteres yellow; wings clear; outer transverse veins more or less sinuous, and a little nebulous; legs yellow, with the exception of the tarsi and fore femora, which are black. The colour of this species varies a good deal, it being sometimes of a yellowish- and sometimes of a bluish-grey. The descriptions of *M. angelicæ*, Scop., agree so closely with those of this species, that I think they apply to the same. Rondani describes a rare fly with a row of discal setæ on the third abdominal segment, which he considered to be the true *M. angelicæ*, Scop. I found a female some years ago with a few bristles in this situation, which I thought must be this insect, I have never seen another, however, so I shall leave this species out of my list. ♀ resembles the ♂, except by the width of the frontalia, and the fore femora are often yellow like the others. Length, 8 mm. Very common.

Sp. 8.—M. LONGITARSIS, s. n.

♂. Eyes bare, subcontiguous; antennæ black, with basal joints testaceous; arista plumose; epistome slightly prominent; palpi black, with testaceous roots; thorax grey, with four dull brown stripes; scutellum grey; abdomen oblongo-conical, grey, with a central dorsal stripe, and the third and fourth segments clothed with numerous long soft bristles on the disc and margins; calyptra large and dull white, with yellow borders; halteres yellow; wings clear, veins yellow but not nebulous; legs yellow, with the bases of the fore femora and the tarsi black, latter very long, those of fore-legs twice as long as the tibiæ, the posterior ones not quite so long. Length, 11—12 mm. Very rare.

I received one from Mr. Bradley, of Sutton Coldfield, and found one myself some years ago. I have not seen a female.

Sp. 9.—M. AFFINIS, Mde.

This species closely resembles *M. urbana*,* from which it may be distinguished by having the eyes of the male more closely contiguous, the thorax less distinctly striped; the abdomen marked with darker tessellations, the fore femora entirely yellow, and the general colour rather darker. Length, 8 mm. Very rare.

Sp. 10.—M. IMPUNCTA, Fln.
indistincta, Rnd.
demigrans, Ztt.

♂. Eyes bare, coherent; antennæ black, with base testaceous; arista plumose, with moderately long hairs; palpi yellow; thorax yellowish-grey, with four rather indistinct stripes; scutellum grey; abdomen grey and immaculate, with a row of setæ upon the disc of the third segment; calyptra dull white; halteres yellow; wings yellow at the base, with transverse veins a little clouded; legs, with the exception of the tarsi, yellow. In some specimens four rather indistinct spots may be observed upon the abdomen, when it corresponds to the *A. demigrans* of Zett. ♀ closely resembles the ♂, except by a wide frontalia. Length, 8 mm. Common.

Sp. 11.—M. SEPARATA, Mgn.
grandæva ?, Ztt.

This species closely resembles *M. impuncta*, but has the antennæ quite black; the palpi black; and the arista with rather shorter hairs. Sometimes the bases of the fore femora are nigrescent, when it corresponds to the *A. grandæva*, Ztt.

Length, 8 mm. Rather local.

Gen. IV.—SPILOGASTER, Mcq.
LIMNOPHORA, Dsv.
CARICEA, Dsv. p.

Gen. ch.—Eyes bare, mostly contiguous or approximate in the

* In the description of this fly in the Ent. Mo. Mag. for February, 1891, the name *pagana* was inserted by mistake for *urbana*.

male; arista plumose, subplumose, or pubescent; calyptra well developed, the lower scale always longer than the upper one; abdomen mostly conical, and always marked with dorso-lateral spots; anal vein not prolonged to the margin of the wing.

I shall include in this genus those species which were formerly placed in the genus *Limnophora*, as they agree with the others in most essential characters, and only differ by the abdominal spots being mostly angular instead of round, and by the arista being very short haired or almost bare.

1 (22) (32) Arista plumose.
2 (14) Legs black or nearly black in the male.
3 (4) Thorax black and unstriped, wings nigrescent.........1. *nigrinervis*, Ztt.
4 (3) Thorax with distinct black stripes.
5 (6) Hind tibiæ hairy.......................................2. *quadrimaculata*, Fln.
6 (5) Hind tibiæ almost bare.
7 (8) (10) Legs quite black ....3. *atripes*, Mde.
8 (7) (9) Knees generally rufous, transverse veins oblique, and eyes of male coherent ....4. *duplicata*, Mgn.
9 (8) Transverse veins nearly straight, eyes of male subcoherent... 5. *duplaris*, Ztt.
10 (7) Hind tibiæ more or less rufous ....6. *communis*, Dsv.
11 (15) Thorax marked with large spots.
12 (13) Scutellum with two lateral spots ....7. *maculosa*, Mgn.
13 (12) Scutellum with one central spot ....8. *notata*, Fln.
14 (2) Legs more or less testaceous or yellow.
14*a* (15) Abdomen yellow and translucent at the base ....8*a*. *uliginosa*, Fln.
15 (11) (20) Abdomen grey; thorax indistinctly striped.
16 (17) Thorax with four post-sutural bristles.....................9. *quadrum*, Fln.
17 (16) Thorax with three post-sutural bristles.
18 (19) Eyes of male contiguous, base of antennæ rufous ...10. *depuncta*, Fln.
19 (18) Eyes of male approximate, antennæ quite black...11. *tetrastigma*, Mgn.
20 (15) Thorax distinctly striped, hind tibiæ with long bristles... 12. *fragripes*, Rnd.
21 Eyes subremote in the male, tibiæ with four or five spines at the apex... 13. *ciliatocosta*, Ztt.
22 (1) (32) Arista subplumose.
23 (27) Scutellum with a dark basal mark.
24 (28) Posterior femora quite rufous.
25 (26) Eyes of male approximate, bases of antennæ pale ..14. *consimilis*, Fln.
26 (25) Eyes of male contiguous ....15. *pertusa*, Mgn.
27 (23) Scutellum immaculate.
28 (24) Posterior femora nigrescent.
29 (30) Forehead prominent, eyes of male subapproximate... 16. *protuberans*, Ztt.
30 (29) Forehead not prominent, eyes of male subcoherent.
31 Hind tibiæ hairy ....17. *spinifemorata*, Mde.

32 (1)(22) Arista pubescent, abdominal spots mostly angular (*Limnophoræ*).
33 (36) Wings nigrescent or subnigrescent.
34 (35) Thorax with four stripes ....18. *compuncta*, Wdm.
35 (34) Thorax with three stripes ....19. *sororcula*, Ztt.
36 (33) Wings clear.
37 (38) Thorax with three stripes ....20. *litorea*, Fln.
38 (39) Thorax hoary, subimmaculate..........................21. *solitaria*, Ztt.
39 (38) Thorax black.
40 (41) Eyes of male subapproximate ....22. *trianguligera*, Ztt.
41 (40)(42) Eyes coherent, abdomen oval ....23. *septemnotata*, Ztt.
42 (41) Eyes of male subcoherent, abdomen subcylindrical...
24. *contractifrons*, Ztt.

Sp. 1.—S. NIGRINERVIS, Ztt.

♂. Eyes nude and coherent; antennæ black, with rather short haired arista; thorax with scutellum black; abdomen dark grey, with four very large subquadrate black spots, which are separated by a longitudinal grey stripe on the dorsum; calyptra white; halteres black; wings nigrescent, the veins and base black; legs black. ♀ lighter in colour than the ♂, with thorax obscurely striped; abdominal spots indistinct, and halteres pale. Length, 5—6 mm. Common.

Sp. 2.—S. QUADRIMACULATA, Fln.

Eyes bare, subcoherent in the male; antennæ black, with a short haired arista; thorax grey, with four stripes, the lateral ones indistinct; post-sutural bristles three in number; abdomen light grey, with four (sometimes six) black spots; calyptra white; halteres yellow; wings with clouded transverse veins; legs black, with hind tibiæ ciliated internally with a few longish hairs. The abdominal spots are brown in the female, and the hind tibiæ bare. Length, 6 mm. Not common.

Sp. 3.—S. ATRIPES, Mde.*

♂. Eyes subcontiguous; arista with long hairs; thorax light grey, with four shining black stripes, and three post-sutural bristles; scutellum grey and immaculate; calyptra white; halteres yellow; abdomen cylindrico-conical, grey, with four small subrounded spots; wings clear, transverse veins oblique and unclouded; legs quite black, with hind tibiæ bare on the inner sides. ♀ unknown.
Length, 6 mm. Rare.

Sp. 4.—S. DUPLICATA, Mgn.

This species is very similar to *S. atripes*, the chief points of distinction are that in *S. duplicata* the eyes of the male are more closely coherent; there are four instead of three post-sutural thoracic bristles; there is mostly a brown spot on the scutellum; the wings have the cross veins more clouded; the legs have the knees testaceous, and the hind tibiæ with a number of short hairs on their inner sides, besides the usual bristles on their outer surfaces. The hind tibiæ are sometimes slightly rufous in the female. Length, 6 mm. Not uncommon.

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* Ent. Mo. Mag., November, 1889.

Sp. 5.—S. DUPLARIS, Ztt.

This species so closely resembles the last that it is difficult to determine whether it is really distinct or only a variety. The fly, which I consider to be the same as that described by Zetterstedt by the name of *S. duplaris*, differs from *S. duplicata* by being rather larger and more oval in shape, by the scutellum being immaculate, the transverse veins less oblique, and the eyes of the male less contiguous. It has four post-sutural thoracic bristles, and is therefore different from the *S. duplaris* of Stein, which I think may be the same as my *S. atripes*. I do not know the female.

Length, 7 mm. Rare.

Sp. 6.—S. COMMUNIS, Dsv.
cæsia, Mcq.

This is another species that is very similar, and has often been confounded with the males of the three preceding ones. It differs, however, from them all by having the posterior tibiæ always more or less rufous in the male, and all the tibiæ as well as the knees and femoral ends red in the female. The thorax has four post-sutural bristles; the wings have the transverse veins more oblique and clouded than in *S. duplicata*, and the calyptra yellower. In the female the abdominal spots are generally small and brown, and it closely resembles the female of *S. quadrum*.

Length, 6—7 mm. Very common.

Sp. 7.—S. MACULOSA, Mgn.
sigillata ?, Rnd.

♂. Eyes bare, approximate; antennæ black, with subplumose arista; thorax light grey, with four large subquadrate black spots, and a central longitudinal stripe; scutellum grey, with a black spot upon each side; abdomen oval, grey, with two subtriangular spots on the first, second and third segments, and a dorsal stripe on the fourth; calyptra and halteres pale; wings clear; cross veins straight and upright; legs black. ♀. Frontalia wide, with a bifid black stripe; the abdominal spots are more quadrate in shape than in the male, and the size is rather larger.

Length, 4—5 mm. Not uncommon.

Sp. 8.—S. NOTATA, Fln.

This species closely resembles the former, but is rather smaller; has only three thoracic spots instead of four, two placed on the front part and one large transverse one behind them; the scutellum also has only one large central spot; the arista has rather longer hairs, and the fifth longitudinal vein of the wings converges a little towards the fourth one at the end, while the veins are parallel or slightly divergent in *S. maculosa*. ♀ very similar to that of *maculosa*, the thoracic spots vary sometimes, the hinder one separating into two. Length, 4 mm. Not common.

Sp. 8*a*.—S. ULIGINOSA, Fln.

Eyes subapproximate in the ♂, widely separated in the ♀. Antennæ testaceous, with the third joint grey; palpi yellow; thorax grey, with four light brown stripes, broken at the suture, behind which are two dark spots towards the centre, with some smaller black marks on the sides; post-sutural bristles three in number; abdomen conical, grey, more or less yellow and translucent at the base, with the hinder part dusky; there are four large angular spots, and an interrupted dorsal stripe on the back; wings with cross veins nebulous; legs yellow, with tarsi black.

Length, 7 mm. Not uncommon.

Sp. 9.—S. QUADRUM, Fln.

♂. Eyes bare and approximate; antennæ black, with plumose arista; palpi black; thorax pale grey, with four indistinct stripes, and four post-sutural bristles; scutellum grey and immaculate; abdomen grey, with two or four small and generally subtriangular spots; calyptra and halteres pale; wings with base yellow; legs with the tibiæ and knees rufous or piceous, and the femora (except their extremities) with the tarsi black. ♀ resembles the ♂, but has the eyes wide apart, the abdominal spots smaller and round, and the hind femora sometimes rufous.

Length, 8—9 mm. Not common.

Sp. 10.—S. DEPUNCTA, Fln.

♂. Eyes bare, contiguous; antennæ with basal joints rufous; arista plumose; palpi black, with pale roots; thorax grey, with two narrow brown lines in the centre, and two broad, indistinctly defined, marks on the sides; post-sutural bristles three in number; scutellum unmarked; abdomen grey, with two and sometimes four small angular or round spots; calyptra and halteres pale; wings with cross veins straight and clear; legs with the tarsi and greater part of fore femora black; the rest yellow. ♀ has the abdominal spots small and round, and the facialia wide.

Length, 8 mm. Uncommon.

Sp. 11.—S. TETRASTIGMA, Mgn.

This species very closely resembles the last, and may be only a variety of the same. The antennæ are quite black; the thorax is rather more distinctly striped; it has three post-sutural bristles, as in *S. depuncta*; the legs have the posterior femora sometimes partly nigrescent at the base in the male; the female has the abdomen often immaculate, and can only be distinguished then from the female of *Mydæa separata*, Mgn., by having three instead of four post-sutural thoracic bristles.

Length, 8 mm. Very rare.

Sp. 12.—S. FRAGRIPES, Rnd.

This species is also very similar to the last two, but has the thorax more distinctly striped, with four instead of three post-sutural bristles; the abdomen has four small subrotund spots; the wings are slightly brunescent, with the transverse veins a little sinuous and clouded; the legs have the fore femora with the tarsi black, the posterior femora as well as all the tibiæ yellow; the hind tibiæ have several very long bristles on their outer or hinder surfaces, and the hind tarsi are ciliated with thick and short hairs on the upper part. ♀ has the base of antennæ rufous; the abdominal spots indistinct; the fore femora testaceous; and the hind tibiæ and tarsi without hairs.

Length, 9—10 mm. Rare.

Sp. 13.—S. CILIATOCOSTA, Ztt.

Eyes bare, and rather widely separated in both sexes; antennæ with the basal joints pale, and the arista plumose for its whole length; thorax yellow-grey, indistinctly striped with four post-sutural bristles; abdomen subcylindrical, with four small round spots; calyptra and halteres pale; wings with the costa ciliated at the base, and the costal spine large; legs with all the tibiæ and knees rufous, and the femora and tarsi nigrescent; the latter are armed with several strong spines at the ends. ♀ very similar to the ♂, but has the eyes rather more widely separated, and the abdomen conical and pointed.

Length, 6 mm. Not common.

This is an anomalous species. It closely resembles *Caricea tigrina*, having the eyes widely separated in both sexes, and the tibiæ armed with spines at the end; the arista, however, is quite plumose.

Sp. 14.—S. CONSIMILIS, Fln.

Eyes of ♂ approximate, bare; antennæ with basal joints mostly pale; arista very short-haired; palpi black; thorax with four lines, the outer ones indistinct; post-sutural bristles three in number; calyptra and halteres pale; abdomen conical, pale grey, with six large triangular spots; wings with the transverse veins rather nebulous; legs with the posterior femora and tibiæ testaceous or yellow; and the fore femora and tarsi nigrescent. ♀ resembles the ♂, except by the wide frontalia.

Length, 6 mm. Not uncommon.

Sp. 15.—S. PERTUSA, Mgn.

This species closely resembles the former, but may be distinguished from it by having the eyes in the ♂ contiguous; the outer dorsal stripes more distinct, and by there being four instead of three post-sutural bristles.

Length, 7—8 mm. Rare.

Sp. 16.—S. PROTUBERANS, Ztt.

♂. Eyes subremote; forehead distinctly prominent; palpi and antennæ black; arista with very short hairs; thorax indistinctly striped, pale grey; scutellum immaculate; abdomen subconical, with four round spots; calyptra and halteres pale; with cross veins nebulous; legs with tibiæ and knees rufous; femora and tarsi nigrescent. ♀ similar to ♂, but has the eyes widely separated, and the abdomen pointed. Length, 6 mm. Rare.

Mr. Verrall has met with this fly in sandy places. I have not found it.

Sp. 17.—S. SPINIFEMORATA, Mde.*
fratercula?, Ztt.

This species closely resembles *S. pertusa*, Mgn., but is strikingly characterized by the femora being all armed on the under-sides with strong spines, and the hind tibiæ ciliated with long and strong hairs. The eyes of the ♂ are subcontiguous, the style is subplumose; the thorax is marked with four stripes, and has four post-sutural bristles; the legs have the fore femora and the basal two-thirds of the posterior ones, together with the tarsi, black, and the knees and tibiæ rufous.

Length, 6 mm. I have only seen one example of this peculiar species, which was found by Miss Prescott Derie in North Wales.

Herr von P. Stein says† that this species is identical with *S. fratercula*, Ztt.; but in his description of that species, Zetterstedt says that it is very similar to *S. pertusa*, Mgn., but makes no mention of the spinose and villose state of the legs, by which it is so remarkably characterized.

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* Ent. Mo. Mag., November, 1889. † Entom. Nachrichten, 1892.

Sp. 18.—S. compuncta, Wdm.

♂. Eyes subcontiguous; antennæ and palpi black; arista slightly pubescent, and thickened at the base; thorax black, with four very indistinct stripes, and four post-sutural bristles; abdomen dark grey, with four large subquadrate spots; calyptra and halteres pale; wings strongly nigrescent; legs black. ♀. Eyes widely separated; thorax and wings grey; abdominal spots brown.

Length, 6—7 mm. Not common.

Sp. 19.—S. sororcula, Ztt.

This species very closely resembles the former, but is smaller; has three instead of four indistinct dorsal stripes; has the calyptra brown, and the wings less nigrescent than in *S. compuncta*. Length, 5 mm. Rare.

Sp. 22.—S. trianguligera, Ztt.

Sp. 24.—S. contractifrons, Ztt.

I have placed these two species together (out of their proper order), because they very closely resemble each other, as well as the two preceding ones. They are very difficult to define, and, without comparison with Zetterstedt's types, it is impossible to be sure about naming them correctly. The specimens which I call *S. trianguligera* have the eyes of ♂ contiguous, the thorax with three post-sutural bristles, the abdomen conical and glaucous, with four approximated subquadrate spots, and the wings subnigrescent; I found this in Scotland. In *S. contractifrons* the eyes are subcoherent, the thorax dark grey, with indistinct stripes, the abdomen subcylindrical, with incurved anal segments, and four spots.

Length of both, from 4—5 mm. Rare; the latter was found in Yorkshire.

Sp. 20.—S. litorea, Fln.

♂. Eyes subapproximate; antennæ black, rather long, with a slightly pubescent arista; thorax grey, with whitish shoulders and sides, and with three somewhat confluent dorsal stripes, as well as three post-sutural bristles; scutellum grey, with two lateral black marks; abdomen clear grey, with four triangular spots; calyptra and halteres pale; wings clear; legs black. ♀. Eyes widely separated, with a bifid black stripe; thorax with one broad central stripe spread over the whole dorsum, sides white. Length, 6 mm. Not uncommon.

Sp. 21.—S. solitaria, Ztt.

♂. Eyes subapproximate; arista shortly pubescent; thorax pale grey, subimmaculate, with four post-sutural bristles; abdomen oblong, subcylindrical, whitish-grey, with four or six spots; calyptra and halteres pale; wings hyaline; legs black.

Length, 4 mm. Local; common near Lake Windermere.

Sp. 23.—S. septemnotata, Ztt.

♂. Eyes large, quite contiguous; antennæ long; arista pubescent; thorax

black, immaculate, with four post-sutural bristles; calyptra nigrescent (sometimes pale); halteres yellow; abdomen ovate, grey, with six or seven subtriangular spots; wings hyaline; legs black. ♀. Eyes moderately separated; thorax dark grey, indistinctly striped. Length, 4 mm. Very common.

Gen. V.—HYDROTÆA, Dsv.

ONODONTHA, Rnd., p.

Gen. ch.—Eyes hairy in some species, and bare in others; calyptra well developed, with unequal sized scales; abdomen ovoid and unspotted; wings with the third and fourth longitudinal veins often somewhat curved towards each other; anal vein prolonged, but not reaching the margin; legs with the fore femora always furnished with teeth near the end, and the fore tibiæ attenuated or notched at the base.

1 (5) Eyes of male hairy.
2 (3) Abdomen of male with transverse white bands..............1. *ciliata*, F.
3 (4) Abdomen light grey, with a dorsal stripe ....2. *occulta*, Mgn.
4 (3) Abdomen dark grey; third and fourth veins of the wing curved towards each other ....3. *cyrtoneura*, Ztt.
5 (1) Eyes bare.
6 (12) (19) Wings with the third and fourth veins distinctly incurved.
7 (9) Hind tibiæ with a tubercle or callosity at the apex.
8 (11) Abdomen with dark tessellations ....4. *dentipes*, F.
9 (7) Hind tibiæ without the callosity.
10 Hind tibiæ with a group of strong bristles in the middle of their front surfaces..5. *similis*, Mde.
11 (8) Abdomen without tessellations ....6. *palæstrica*, Mgn.
12 (6) (18) Wings with third and fourth veins slightly incurved.
13 (15) Calyptra and halteres pale.
14 Thorax black, middle tarsi padded with hairs ....7. *irritans*, Fln.
15 (13) Calyptra ochreous; halteres black.
16 Eyes of male approximate ....8. *Rondanii*, Mde.
17 Wings with a finely haired patch ....9. *impexa*, Lw.
18 (12) (6) Wings with third and fourth veins parallel.
19 (22) (23) Hind tibiæ with inner sides bare.
20 (21) Fore femora with two long teeth ....10. *meteorica*, L.
21 (20) Fore femora with one tooth................................11. *velutina*, Dsv.
22 (19) Hind tibiæ with a tuft of hairs ....12. *armipes*, Fln.
23 (19) Hind tibiæ with a rigid fasciculus ....13. *fasciculata*, Mde.
24 Small species with coherent eyes and white frontal spot... 14. *glabricula*, Fln.

Sp. 1.—H. CILIATA, F.

spinipes, Fln. and Zett.

♂. Eyes approximate and long haired; frontalia black, with a snowy-white

spot in front over the antennæ, which are short, with a pubescent arista; thorax shining blue-black, immaculate; abdomen blue-black, with white interrupted transverse bands; calyptra large and white; halteres yellow; wings hyaline, with the third and fourth veins slightly convergent; legs black; fore femora with two teeth, middle femora with two long curved spines at the end, and the hind femora with a blunt spine in the middle on the under-side; hind tibiæ ciliated internally. ♀. Eyes moderately separated and nude; abdomen black, with the last segment lead-coloured; legs unarmed. Length, 8 mm. Not rare.

Sp. 2.—H. OCCULTA, Mgn.

♂. Eyes hairy and subcoherent; arista pubescent; thorax black, immaculate; abdomen glaucous, with an interrupted dorsal stripe; calyptra pale; halteres nigrescent; fore femora with two teeth; hind femora with an erect blunt spine beneath, near the base. ♀ black, with grey tomentum; eyes moderately separated and bare; wings clear. Length, 4 mm. Not uncommon.

Sp. 3.—H. CYRTONEURINA, Ztt.
silvicola, Lw.

♂. Eyes hairy, approximate; arista thickened and hairy at the base; thorax black; abdomen dark grey, with central black stripe; wings brunescent, with the third and fourth veins curved a little towards each other at the ends; calyptra and halteres nigrescent; legs with two teeth on the fore femora
Length, 7—8 mm. Rare.

Sp. 4.—H. DENTIPES, F.

♂. Eyes approximate, bare; arista pubescent; thorax black, front grey, with the commencement of four black stripes; abdomen grey, with white reflections, dark tessellations, and a black dorsal stripe; calyptra pale, halteres with a dark knob; wings tinged with brown, and having the third and fourth veins decidedly convergent; legs with two small contiguous teeth beneath the fore femora, a tuft of hair on the under-side of the fore tibiæ, and a callosity at the inner apex of the hind tibiæ. ♀ resembles the ♂, but has the eyes widely separated; the wings hyaline, and the legs simple. Length, 8 mm. Very common.

Sp. 5.—H. SIMILIS, Mde.*
eximia, Stein.†

This species closely resembles the last, but differs by being rather larger, of a brighter blue-black colour; by the eyes of the male being more approximated; the thorax more distinctly striped; the abdomen with fewer dark tessellations; the fore femora with only one sharp tooth, together with a blunt tubercle; the fore tibiæ without the apical tuft; the hind tibiæ destitute of the callosity, and with a group of strong bristles on their under surfaces. Length, 8—9 mm. Rare.

Sp. 6.—H. PALÆSTRICA, Mgn.

This is also very similar in appearance to *H. dentipes*, but differs by having

* Ent. Mo. Mag., April, 1887. † Wiener Ent. Zeitung, 1888, ix, p. 289.

three instead of four short, indistinct, black dorsal stripes on the thorax; by the abdomen being of an uniform glaucous-grey, with a narrow dorsal stripe, without any dark tessellations; by the wings being more brunescent; the fore tibiæ without any tuft of hairs, and the hind tibiæ without a callosity. There is a great resemblance between this species and *H. cyrtoneurina*, but the latter has hairy eyes, and the veins less curved. Length, 8 mm. Rare.

Sp. 7.—H. IRRITANS, Mgn.
meteorica, Mcq.
dentimana ?, Mgn.

♂. Eyes coherent, very shortly pubescent; arista sub-plumose; thorax black, unstriped; abdomen grey, with a rather broad, irregular dorsal stripe; calyptra fuscous; halteres yellow; wings subnigrescent, with the third and fourth veins very slightly convergent, and outer cross vein oblique and straight; legs with the fore femora armed with two teeth, fore tibiæ contracted, deeply indented at the base, and thickened and hairy towards the end; middle tibiæ with two or three spines at the end, and with the tarsi coated beneath with a pad of thick short hairs; hind femora and tibiæ elongated, and a little curved; the former clothed externally with long soft hairs, and the latter ciliated along its outer side with an even row of very short bristles, which form a little tuft at the apex. ♀. Eyes moderately separated; thorax lighter, and partially striped; calyptra pale; and legs simple. It may be known from its congeners by the subplumose arista, and hairy middle metatarsi.

Length, 7 mm. Very common.

Sp. 8.—H. RONDANII, Mde.*

♂. Eyes bare, subapproximate; arista with the base thickened and pubescent; thorax with scutellum shining black, and unstriped; abdomen brownish-grey, and glistening with a rather wide dorsal stripe; calyptra brown; halteres black; wings rather short and fuscous, with the third and fourth veins slightly convergent; legs with two teeth under the fore femora, one much longer than the other; fore tibiæ narrowed at the base, and slightly notched; hind tibiæ attenuated at the base, without callosities at the apex, and ciliated with soft hairs along their outer surfaces. This species resembles *H. palæstrica*, but has the veins of the wings less curved, the thorax blacker, the abdominal stripe wider, and the size rather less.

Length, 7 mm. Rare.

Sp. 9.—H. IMPEXA, Lw.

This shining black species is somewhat like *H. Rondanii*, but has the eyes of the male contiguous, the abdominal stripe narrower; the wings paler in colour, and marked by a very peculiar grey patch of microscopic hairs running across in front of the outer transverse vein; the middle femora have also a group of strong spines on the under surface near the base. ♀ rather smaller, of an uniform black colour, with rather grey wings. Length, ♂, 6 mm.; ♀, 5 mm. Not uncommon.

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* Ent. Mo. Mag., November, 1881, p. 125.

Sp. 10.—H. METEORICA, L.

♂. Eyes bare, closely coherent; arista subpubescent; thorax black, unstriped; abdomen dull grey, with dorsal stripe; calyptra brown; halteres black; wings fuliginous, with fourth and fifth veins quite parallel; legs with two sharp teeth under fore femora; hind tibiæ straight, with inner sides bare. ♀. Eyes moderately separated; thorax dark grey, with four indistinct stripes; wings clear, and legs simple. Length, 4—5 mm. Not common.

Sp. 11.—H. VELUTINA, Dsv.
brevipennis, Lw.

This species resembles *H. meteorica*, but is larger, and has only one small subfemoral tooth instead of two. The thorax is velvety-black; abdomen pale grey, with dorsal line; hind femora somewhat elongated; and hind tibiæ rather curved and bare internally; wings rather short and brown. Length, 6 mm. Rare.

Sp. 12.—H. ARMIPES, Fln.
floccosa, Mcq.

♂. Eyes bare and coherent; arista subnude; thorax bright black; abdomen grey, with a fine dorsal stripe; calyptra pale; halteres black; wings subhyaline, with third and fourth veins parallel; legs with two teeth under the fore femora, one much larger than the other; hind femora with a straight blunt spine in the middle of the under surface; hind tibiæ ciliated with long soft hairs along the whole inner surface, and having a long tuft in the middle of the joint. ♀ dark grey, legs simple. Length, 5 mm. Common.

Sp. 13.—H. FASCICULATA, Mde.*
albipunctata ?, Ztt.

This species closely resembles, and has been confounded with, *H. armipes*; it differs from it, however, by the abdominal stripe being dilated into a subtriangular spot over the second segment; by the halteres being yellow, instead of black; by having only one tooth on the fore femora; by the middle femora having two or three strong bristles on the under surface near the base; and by the hind tibiæ having a rigid fasciculus of two or three blunt bristles a little before the middle of the inner side, instead of the tuft of hairs; together with a few hairs on both sides near the apex.

This species is probably the same as the *A. albipunctata*, Ztt., but if so, that author has quite overlooked its generic character, viz., the tooth on the fore femora. Length, 5 mm. Common.

Sp. 14.—H. GLABRICOLA, Fln.
parva, Mde.†

This, by far the smallest species in the genus, has the eyes of the male bare, large, and closely coherent; the antennæ with a glistening white spot over the base;

* Ent. Mo. Mag., November, 1881. † Ent. Mo. Mag., December, 1889.

arista subnude ; thorax shining black, with grey shoulders ; abdomen light grey, with a dorsal stripe ; calyptra subfuscous ; halteres black ; wings pale brown ; legs with one sharp tooth under the fore femur, and a blunt tubercle behind it ; fore tibiæ deeply indented at the base, middle femora with two long blunt spines beneath, near the base ; hind tibiæ subnude. Length, 3 mm. Rare.

Gen. VI.—OPHYRA, Dsv.

Gen. ch.—Eyes large and bare ; arista subnude ; abdomen oval and smooth ; calyptra large, with unequal scales ; wings with anal vein prolonged, but not reaching the margin ; hind tibiæ curved and ciliated ; colour, metallic-blue or black.

1 (2) Calyptra nigrescent ....1. *leucostoma*, Wdm.
2 (1) Calyptra pale ....2. *anthrax*, Mgn.

Sp. 1.—O. LEUCOSTOMA, Wdm.
nitida, Dsv.

♂. Shining blue-black, immaculate ; eyes bare, subcontiguous ; face snowy-white, with a white spot over the antennæ ; calyptra fuscous ; halteres black ; wings hyaline ; legs with hind tibiæ curved, and with a tuft of hair in the middle of the inner side. ♀. Eyes moderately separated, legs simple.

Length, 7 mm. Not uncommon.

Sp. 2.—O. ANTHRAX, Mgn.

This species resembles the last, but is much smaller ; the colour is rather greenish ; the eyes are subcontiguous in the ♂ ; the calyptra are pale ; halteres black ; hind tibiæ a little curved, and ciliated on both sides with long hairs, but without a tuft. ♀ similar to ♂, but with moderately separated eyes and simple legs. Length, 4 mm. Local.

Gen. VII.—DRYMEIA, Mgn.

Gen. ch.—Eyes bare, subcontiguous in the ♂ ; antennæ short, with subplumose arista ; peristome and cheeks bristly ; proboscis elongate, with a horny movable pointed apex ; abdomen oblong and hairy ; calyptra moderately developed, with unequal scales ; wings with anal vein long, but not reaching the margin ; legs setose.

Sp. 1.—D. HAMATA, Fln.
obscura, Mgn., Mcq.

Only one European species is known of this peculiar genus. It is black, with some grey reflections upon the abdomen ; the wings are nigrescent ; the calyptra brown ; and halteres black. ♀ similar to ♂, except by having wider frontalia.

Length, 6—8 mm. Common.

Gen. VIII.—ACHANTHIPTERA, Rnd.

Gen. ch.—Eyes bare, semicircular, approximate in both sexes; arista pubescent; calyptra large, with unequal scales; abdomen elongated, subcylindrical in the ♂, ovato-conical and tapering in the ♀; wings with the auxiliary vein spinose, and anal vein elongated but not reaching the margin; legs elongated with large pulvilli.

Sp. 1.—A. INANIS, Fln.

This peculiar fly has the antennæ, palpi, thorax, abdomen and legs yellow, the hind tarsi in the ♂, also the fore and middle ones in the ♀, are black, and there is a bluish-grey striped spot on the front of the thorax.

Length, 8—9 mm. Not common.

The larvæ have been found in wasp's nests.

Gen. IX.—POGONOMYIA, Rnd.

Gen. ch.—Eyes bare; forehead prominent; antennæ short, with second joint bristly; arista subpubescent; peristome thickly bearded with bristles; abdomen oblong and hairy; calyptra of moderate size, with scales unequal; wings with anal vein not reaching the margin; legs setose.

Sp. 1.—P. MEADII, Pok.
alpicola, Mde.*

This genus was formed by Rondani to include a single alpine species which he named *P. alpicola*. I met with a number of specimens on high ground between Bradford and Halifax in 1881, which I described as the same species; Herr Pokorny of Vienna, however, found a fly in the Tyrol differing somewhat from mine, which he says is the true *P. alpicola*, so he has named the one I captured *P. Meadii*.

This little black fly is somewhat similar to *D. hamata*, but has an ordinary shaped proboscis; it is of a shining black colour, with fuscous wings and black halteres. Pokorny says that it differs from *P. alpicola* by being smaller, by having the forehead shorter, the palpi rather subclavate; the wings darker, and the colour brighter black, with fewer grey reflections. He met with both species in the Tyrol.

Length, 6—7 mm.

Gen. X.—HYDROPHORIA, Dsv.

Gen. ch.—Eyes nude, contiguous or approximate in the ♂, widely separated in the ♀; arista plumose or subplumose; calyptra moderate or rather small, but with the scales always unequal in size; anal vein prolonged to the margin of the wing; abdomen conical, mostly with projecting subanal processes in the ♂. The frontal space in the ♀ usually contains two little decussating setæ, placed just before the ocellar triangle.†

* Ent. Mo. Mag., January, 1882.
† These little decussating setæ are sometimes of value as a generic or specific character.

1 (7) Legs black.
2 (6) Thorax with three stripes.
3 (4) Scutellum with apex black, and abdominal stripe of uniform width... 1. *ambigua*, Fln.
4 (3) Scutellum quite grey, abdominal stripe tapering ....2. *divisa*, Mgn.
5 Abdomen with two lateral subanal tufts.....................3. *caudata*, Ztt.
6 (2) Thorax with four stripes ....4. *fusca*, s. n.
7 (1) Legs partly yellow.
8 (9) Femora and tibiæ all pale ....5. *linogrisea*, Mgn.
9 (8) Tibiæ only pale.
10 (14) Arista plumose, with long hairs.
11 (12) Abdomen with basal segment partly pale and translucent... 6. *anthomyiea*, Rnd.
12 (11) Abdomen with all segments grey ....7. *conica*, Wdm.
13 Fore tibiæ with apices nigrescent.........................8. *brunneifrons*, Ztt.
14 (10) Arista subplumose, with short hairs ....9. *socia*, Fln.

Sp. 1.—H. AMBIGUA, Fln.

♂. Eyes subcontiguous, bare; face rather prominent, silvery-white; arista plumose; palpi black; thorax with three broad black stripes, with intervening spaces and sides glistening white; post-sutural bristles three; scutellum grey, with apex black; abdomen oblong, cylindrical, grey, with a rather broad dorsal black stripe of uniform width; subanal appendages large, hairy, and projecting; calyptra and halteres pale; wings with the third and fourth long veins rather divergent at the ends; hind tibiæ ciliated externally by bristles of uneven length. ♀ very similar to ♂, but has eyes widely separated by a black frontal stripe, containing two little decussating bristles; the abdomen has a broad dorsal stripe as well as black and white tessellations. Length, 6 mm. Not common.

Sp. 2.—H. DIVISA, Mgn.

This species strongly resembles *H. ambigua*, and has generally been confounded with it; it differs, however, by having the face less prominent and less white; the thoracic stripes less distinct, and the sides greyer; the scutellum without the black apex; the abdominal stripe wide over the first segment and then becoming narrow; the subanal male appendages smaller and less hairy, and with two long horny lamellæ; the wings have the third and fourth long veins quite parallel; the hind tibiæ have a row of very short even bristles on their outer sides, together with one long bristle in the centre. ♀. Eyes separated by a broad black frontal stripe, rufous in front, and containing two small decussating setæ; thorax grey, indistinctly striped; abdomen grey, with a very narrow dorsal stripe, and a few dark tessellations.

Length, 6 mm. Rare.

Sp. 3.—H. CAUDATA, Ztt.

This is also very similar to the two preceding species. The face is rather prominent; the arista has long hairs; the thorax is marked with three broad stripes; there are three post-sutural bristles; the abdomen, besides a rather wide dorsal

stripe, has black reflections or marks on the sides of the segments; the subanal processes are not large, but furnished on each side with a tuft of long hairs; the hind tibiæ are almost bare of bristles. ♀. Frontal stripe wide and black, with two decussating setæ; thorax marked like the ♂; abdomen grey, unstriped, with a few dark reflections. Length, 6 mm. Rare; rather local.

Sp. 4.—H. FUSCA, s. n.

♂. Forehead slightly prominent, eyes bare, subapproximate; face silvery-white; arista plumose, with moderately long hairs; epistome slightly projecting; thorax shining brown-black, and grey upon the sides and front margin, where it is marked by four short black stripes; post-sutural bristles three; scutellum grey; abdomen ovato-conical, grey, and glistening with some white and brown reflections, and having a narrow interrupted dorsal stripe; the third and fourth segments are each encircled by two rows of small bristles, one across the disc, the other on the hinder margin; apex hairy; subanal processes small; calyptra and halteres pale, the latter with black stalks; wings subnigrescent, cross veins slightly oblique and straight; third and fourth veins rather divergent, costal spine distinct; hind tibiæ a little bent, and almost without bristles. ♀. Unknown.

Length, 5 mm. Rare; I found a single male at Silverdale, North Lancashire, in June, 1896.

Sp. 5.—H. LINOGRISEA, Mgn.

♂. Eyes nude, coherent; face white; antennæ black, with long-haired arista; palpi rufous, with black extremities; thorax with scutellum yellowish-grey, the former with four black stripes, the intermediate ones being very narrow; abdomen conical, yellow-grey, with obscure dorsal stripe and dark tessellations; calyptra and halteres pale; wings slightly flavescent; legs yellow, with the exception of a streak on the fore femora and the tarsi, which are black. ♀ has a wide black stripe, but in other respects resembles the ♂. Length, 6—7 mm. Not common.

Sp. 6.—H. ANTHOMYIEA, Rnd.

♂. Eyes subcontiguous, bare; face white; antennæ and palpi black; arista long-haired; thorax and scutellum yellowish-grey, the former with three wide black stripes, the outer ones broken; abdomen conico-cylindrical, grey, with the basal segments mostly testaceous and semipellucid at the sides; the other segments have a semicircular fugitive spot on each side of the central dorsal stripe; calyptra and halteres pale, the former with a yellow margin; wings subfuscous, transverse veins sinuous; subanal processes complicated, two long hairy and horny lamellæ extending forwards; legs have the femora and tarsi black, and the tibiæ rufous or piceous. ♀ similar to ♂, except by the width of the frontalia.

Length, 7 mm. Not uncommon.

Sp. 7.—H. CONICA, Wdm.

♂. Eyes coherent, nude; antennæ black, arista long-haired; palpi black; thorax grey, with four stripes, outer pair wide and irregular; post-sutural bristles four in number, hinder one small; abdomen conico-cylindrical, grey, with a longi-

tudinal dorsal stripe, segments without discal setæ; subanal appendages with two styles; calyptra fuscous; halteres with a red knob; wings brownish, with outer cross veins oblique and sinuous; legs black, with tibiæ testaceous. ♀ similar to ♂, but has a wide black frontal stripe, with two decussating setæ, and pointed abdomen.

Length, 8—9 mm. Very common.

Sp. 8.—H. BRUNNEIFRONS, Ztt.

Only the ♀ is known of this species. The frontal stripe is wide and black, with the front margin often red; it contains two small decussating setæ; the arista is long-haired; thorax grey, with three rather indistinct stripes, the central one being often divided; there are three post-sutural bristles; abdomen conical and pointed, tessellated with brown, and with a central dorsal stripe; calyptra and halteres pale; legs black tibiæ testaceous, with the front halves of the fore tibiæ nigrescent.

Length, 7 mm. Rare.

Sp. 9.—H. SOCIA, Fln.

♂. Eyes coherent, bare; face white, antennæ black, with basal joints sometimes rufous; palpi black; arista pubescent; thorax grey, with four stripes, the outer ones broad and black, the inner ones short and indistinct; post-sutural bristles three in number, scutellum grey, sometimes with a dark spot at the base; abdomen depressed, grey, with an interrupted black dorsal stripe; subanal processes large; calyptra and halteres pale; wings yellow at the base; legs black, with tibiæ and knees testaceous. ♀ similar to the ♂, the wide frontal stripe black.

Length, 4 mm. Not common.

Gen. XI.—HYLEMYIA, Dsv.

Gen. ch.—Eyes bare, contiguous or subcontiguous in ♂; arista plumose or subplumose; thorax usually with three post-sutural setæ; calyptra small, with scales equal in size; abdomen usually prolonged, with five segments, conico-cylindrical or oblong narrow, and flattened, with the ventral surface often furnished with tufts of hair; wings with the anal vein prolonged to the margin. ♀. Eyes separated by a wide frontal stripe, in which are usually seated two small decussating bristles, the same as are found in the *Hydrophoria* and some other genera.

1 (21) Legs black.
2 (9) Arista with long hairs.
3 (4) Thorax with two black stripes............................1. *virginea*, Mgn.
4 (3) Thorax indistinctly striped.
5 (6) Proboscis very thick ....2. *flavipennis*, Fln.
6 (5) Proboscis of ordinary shape.
7 (8) Abdomen conico-cylindrical....................................3. *variata*, Fln.
8 (7) Abdomen depressed and oblong ....4. *lasciva*, Ztt.
9 (2) Arista subplumose or pubescent.

10 (11) Hind tibiæ very setose..5. *seticrura*, Rnd.
11 (10) Hind tibiæ with few bristles.
12 (15) Abdomen flat and depressed.
13 (14) Eyes subcontiguous ....6. *cardui*, Mgn.
14 (13) Eyes contiguous ....7. *nigrescens*, Rnd.
15 (12) Abdomen narrow and conical.
16 (17) Thorax dark brown with central stripe..................8. *cinerella*, Mgn.
17 (16) Thorax yellow-grey with five stripes.......................9. *spinosa*, Rnd.
18 (15) Abdomen depressed, with row of triangular spots......10. *cinerosa*, Ztt.
19 (20) Wings with cross veins nebulous ....11. *pullula*, Ztt.
20 (19) Wings with cross veins clear.
21 (22) Ventral abdominal segments with a long hairy tuft; thorax indistinctly striped ....12. *pencillaris*, Rnd.
22 (21) Ventral surface without tuft; thorax unstriped ......13. *antiqua*, Mgn.
23 (1) Legs pale, or partly pale.
24 (34) Arista with long hairs.
25 (33) Thorax distinctly striped.
26(27)(30) Thorax with two stripes.......................................14. *puella*, Mgn.
27(26)(30) Thorax with three stripes.
28 (29) Legs with only the tibiæ pale ....15. *strigosa*, F.
29 (28) The posterior femora, as well as all the tibiæ, pale...16. *nigrimana*, Mgn.
30(26)(27) Thorax with four stripes.
31 (32) Femora and tibiæ all pale ....17. *præpotens*, Wdm.
32 (31) Only the tibiæ pale ....18. *operosa*, Mgn.
33 (25) Thorax indistinctly striped ....19. *coarctata*, Fln.
34 (24) Arista short haired ....20. *criniventris*, Ztt.

Sp. 1.—H. VIRGINEA, Mgn.

♂. Eyes bare, contiguous; antennæ and palpi black; arista thickly, but not very long, haired; face white; thorax with scutellum bluish-grey, the middle very faintly striated, but the sides marked with two broad black stripes; abdomen conico-cylindrical, narrow, bluish-grey, with a narrow dorsal stripe; calyptra and halteres pale; wings yellowish-grey, cross veins oblique and straight; legs black. ♀ similar to ♂, frontal stripe moderately wide. Length, 6—8 mm. Not common.

Sp. 2.—H. FLAVIPENNIS, Fln.
crassirostris, Mgn.

♂. Eyes bare, subcontiguous; antennæ and palpi black; arista long-haired; proboscis long and very thick; thorax dark brown and shining, indistinctly striped; abdomen dark grey, hairy, with an interrupted dorsal stripe formed by a row of subtriangular spots, one at the base of each segment; calyptra and halteres pale; wings flavescent; legs black and setose; hind tibiæ with numerous bristles and hairs on both sides. ♀ very similar to the ♂.

Length, 6—7 mm. Not common; rather local.

Sp. 3.—H. variata, Fln.

♂. Eyes contiguous, bare; face rather prominent, white; antennæ and palpi black; arista long-haired; thorax dark grey, with three or five indistinct stripes; abdomen narrow, conico-cylindrical, grey, covered with minute hairs, and with a median dorsal stripe; calyptra and halteres pale; wings subfuscous; legs black. ♀ very similar to ♂, frontal stripe moderately wide, red in front and grey behind.

Length, 5 mm. Very common.

Sp. 4.—H. lasciva, Ztt.

This small species somewhat resembles the last; the arista has very long hairs; the thorax is dark brown, with three rather indistinct stripes; the abdomen is oblong, depressed, dark grey and hairy, with a wide interrupted dorsal stripe, and large subanal appendages. ♀ similar to ♂, but paler in colour, the frontal stripe is moderately wide and black. Length, 3—4 mm. Very common.

Sp. 5.—H. seticrura, Rnd.

brunneilinea ?, Ztt.

♂. Eyes bare, subcontiguous; arista shortly but thickly haired; proboscis long and thick, as in *H. flavipennis*; thorax yellowish-grey, with five stripes; abdomen oblong, flattened, hairy, grey, with a longitudinal dorsal stripe; subanal appendages large, with two projecting hairy lobes; calyptra and halteres pale; wings subfuscous; legs spinous, hind tibiæ thickly armed with long rigid hairs along the whole of their inner and front surfaces. ♀ similar to ♂, frontal stripe wide and rufous, bordered by a white margin; abdomen conical and immaculate; wings with long costal spine, and the base of the costa itself ciliated (it is nearly smooth in the ♂).

Length, 7—8 mm. Common.

Sp. 6.—H. cardui, Mgn.

brunescens ?, Ztt.

♂. Eyes subcontiguous, bare; forehead subprominent; antennæ black; arista very short-haired, with a small, black, oval prominence at the base; thorax brownish-grey, with hoary sides and three longitudinal stripes, divided by rows of bristles; abdomen long, narrow, depressed, and hairy, with the second segment prolonged; ash-grey, with black reflections, and a black, interrupted, longitudinal stripe, as well as transverse lines; subanal processes with two projecting lobes, and the middle of the ventral surface with a short tuft of hairs; calyptra grey, with the edges ciliated; halteres yellow; wings subfuscous; legs black, hind tibiæ with a few short bristles on their inner surfaces, and five or six longer ones on the outer sides.

Length, 6 mm. Not common; rather local.

Sp. 7.—H. nigrescens, Rnd.

This species closely resembles *H. cardui*, and has probably been mostly con-

founded with it; both kinds were probably included by Zetterstedt in his *A. brunescens.* It may be distinguished from *H. cardui* by the following characters:— The eyes are more closely contiguous; the arista is rather shorter haired, and has a somewhat prolonged thickening at the base, instead of a bead-like prominence; the thorax is less distinctly striped, and less grey on the sides; the calyptra are subfuscous, and have long ciliæ; the veins of the wings are more divergent, and the hind tibiæ are more spinose on their outer surfaces. Not common.

Sp. 8.—H. cinerella, Mgn. (not Fln. nor Schiner).

♂. Eyes subcontiguous, bare; face rather prominent; antennæ and palpi black; arista shortly, but distinctly, hairy; thorax brownish-black, with an indistinct central black stripe, and two rather distant lateral ones; shoulders and sides grey; abdomen narrow oblongo-conical, grey, with a slender dorsal stripe; calyptra and halteres pale; wings clear; legs black, and rather long; hind tibiæ spinous, a few setæ being seated on the inner sides near the middle. Length, 6 mm. Rare.

Sp. 9.—H. spinosa, Rnd.

This species, which has not yet been recorded as British, has the eyes of the ♂ subcontiguous, the face slightly prominent; antennæ and palpi black; arista pubescent; thorax yellow-grey with five stripes; scutellum grey; abdomen oblongo-conical, yellow-grey, with a longitudinal dorsal stripe, ventral surface hairy down the centre, but without any long tufts; subanal processes moderate in size; calyptra and halteres pale; wings subfuscous; legs black, with hind femora ciliated along the whole under-surface; hind tibiæ subnude.

This species bears a close general resemblance to *H. variata*, but differs by having a pubescent instead of a plumose arista, and by being of a yellower-grey colour. Length, 7 mm. Rare; I captured one ♂ at Windermere, in July, 1892.

Sp. 10.—H. cinerosa, Ztt.

♂. Eyes subcoherent, bare; arista pubescent; proboscis rather thick; thorax and scutellum dark grey and immaculate; abdomen linear and depressed, dark grey, and marked down the centre of the back with four subtriangular spots; subanal processes large; calyptra and halteres pale; wings flavescent; legs black, hind tibiæ clothed on the inner sides with soft hairs. ♀ very similar to ♂.

Length, 3 mm. Not common.

Sp. 11.—H. pullula, Ztt.
longula, Mgn. (not Fln.).

♂. Eyes bare, coherent; antennæ and palpi black; arista short-haired; thorax grey, with three rather indistinct stripes; abdomen conical, grey, with an interrupted longitudinal stripe, and shining black apex; calyptra and halteres pale; wings with costal spine; cross veins nebulous; legs black, hind tibiæ with a few setæ on the inner sides. ♀ very similar to ♂, frontal space wide and grey.

Length, 3—4 mm. Not common; rather local.

Sp. 12.—H. PENICILLARIS, Rnd.
cinerella, Schr.

♂. Eyes bare, subcontiguous; antennæ and palpi black; arista with short hairs; thorax griseous, with three rather indistinct stripes; abdomen grey, long, narrow, depressed, and hairy, with black reflections, and a longitudinal dorsal stripe; ventral surface with a long tuft of hairs in the middle, extending backwards almost up to, or beyond, the apex; calyptra and halteres pale; legs black, with hind tibiæ subnude. ♀. Whitish-grey; thorax unstriped; abdomen pointed, with a row of rather indistinct, dorsal, subtriangular spots; frontal stripe wide and red, with two small decussating setæ. Length, 6 mm. Rare.

Sp. 13.—H. ANTIQUA, Mgn.

♂. Eyes subcontiguous, bare; antennæ and palpi black; arista pubescent; thorax yellowish-grey, indistinctly striped, with light shoulders and sides; abdomen flattened, elliptical, and pale grey, with a fine, straight, black dorsal line; calyptra and halteres pale; wings grey; legs black; hind tibiæ with a few erect bristles on the inner side; outer sides with a number of irregular spines. ♀. Frontal space wide, with a red stripe in the middle, and white sides; abdomen conical, pointed, and indistinctly striped. Length, 5—6 mm. Very rare.

Sp. 14.—H. PUELLA, Mgn.

This species closely resembles *H. virginea*, and is probably only a variety of the same, with rufous or piceous tibiæ. I cannot find any distinctive points of difference between them. Rare.

Sp. 15.—H. STRIGOSA, Fab.
vulgaris, Panz.

♂. Eyes bare, contiguous; antennæ black, with a white spot on the base; arista long-haired; palpi black; thorax grey, with dark reflections and three stripes, with rows of bristle spots between them; abdomen conico-cylindrical, hairy and grey, with a longitudinal black line; apex grey, subanal processes small; calyptra and halteres pale; wings grey, with cross veins oblique and sinuous; legs black, with the exception of the tibiæ, which are testaceous. ♀. Frontal space red in front, grey on the sides and behind; abdomen conical and acute, with rather a wide dorsal stripe and spots on the sides of the segments; legs with the femora as well as the tibiæ pale. Length, 7—8 mm. Very common.

Sp. 16.—H. NIGRIMANA, Mgn.

This species closely resembles the last; it is usually a little larger, and the male has the four posterior femora as well as all the tibiæ pale. The ♀ is very difficult to distinguish from that of *H. strigosa*. Length, 8—9 mm. Not common.

Sp. 17.—H. PRÆPOTENS, Wdm.

♂. Eyes bare, subcontiguous; facial triangle black, with a white spot over the

antennæ; face bright silky-white; antennæ and palpi black; arista long-haired; thorax pale grey, with four stripes, middle pair narrow and indistinct, outer ones broad and irregular; abdomen conico-cylindrical, pale grey, with a longitudinal dorsal stripe, and the hinder edges of the segments surrounded by setæ seated upon black spots; apical segment and subanal processes pale yellow; calyptra and halteres pale; wings with yellow roots, longitudinal veins divergent, and cross one very oblique and sinuous; legs pale, with tarsi only black. ♀. Frontal space black.

Length, 8—10 mm. Rare.

Sp. 18.—H. OPEROSA, Mgn.

♂. Eyes bare, subcontiguous; antennæ and palpi black; arista with long hairs; thorax grey, indistinctly striped, with four striæ, the central pair being very narrow, and the outer ones (rather distant) wide and irregular; abdomen conical, grey, with a longitudinal stripe and dark edges to the segments; calyptra and halteres yellow; wings clear; legs black, with tibiæ testaceous. ♀. Frontal space black, with front margin red. Length, 4 mm. Very rare.

Sp. 19.—H. COARCTATA, Fln.

♂. Eyes bare, subcoherent; antennæ and palpi black; arista subplumose; thorax grey, substriated; abdomen grey, narrow, hairy, with obscure transverse striæ and an interrupted dorsal stripe; apex grey, subanal segments hairy, with two black lamellæ; wings with yellow veins; calyptra and halteres pale; legs black, with pale or piceous tibiæ. ♀. Thorax and abdomen pale grey and immaculate; frontal space wide, with front part red; legs with the four posterior femora, together with all the tibiæ, pale.

Length, 6 mm. Not rare; the larvæ feed upon the young stalks of wheat.

Sp. 20.—H. CRINIVENTRIS, Ztt.
tibiaria, Rnd.

In general characters, size and appearance, this species closely resembles *H. penicillaris*, Rnd., but differs by having the tibiæ testaceous, as well as by the following points of structure, viz., the second abdominal segment (the first being short and indistinct) is prolonged in the same manner as in *H. cardui*, while in *H. penicillaris* it is not much longer than the others; the ventral tuft of hair extends further backwards; and the hind tibiæ are ciliated internally with a few erect bristles, as in *H. antiqua*, while they are subnude in *H. penicillaris*. Not common.

Gen. XII.—EUSTALOMYIA, Kowarz.

Gen. ch.—Forehead prominent, without white spot over the antennæ; eyes bare, approximate in the ♂, separated by a widish straight space in the ♀, in which the decussating setæ are wanting; arista with hairs varying much in length, it being plumose, subplumose or pubescent; thorax and abdomen of a pale whitish-grey colour, marked

with sharply defined black stripes and spots, the former having three post-sutural bristles; calyptra small, with even sized scales; wings with anal vein prolonged to the margin.

1 (2) (3) Arista plumose... ....1. *hilaris*, Fln.
2 (1) (3) Arista subplumose ....2. *festiva*, Ztt.
3 (1) (2) Arista pubescent ....3. *histrio*, Ztt.

Sp. 1.—E. HILARIS, Fln.

♂. Eyes subcoherent, bare; arista with long hairs; thorax whitish-grey, with a shining black median stripe, having a dilated roundish extremity, and four lateral spots, two before the suture, round, and two behind the suture, oblong; scutellum with the sides deeply bordered with black, and the disc bare; abdomen long, narrow, subcylindrical, pale grey, with anal segments small, and marked with a longitudinal black dorsal line, and a series of widish subsemilunar cross bands; the segments are without discal setæ; calyptra white; halteres yellow; wings with the cross veins oblique and sinuous; legs black, hind tibiæ with a few bristles on the inner sides. ♀ resembles the ♂, with the exception of a moderately wide frontal stripe, and a pointed apex to the abdomen. Length, 5—10 mm.

Sp. 2.—E. FESTIVA, Ztt.

This resembles *E. hilaris* in general shape and colour, but has the arista with much shorter, though distinct, hairs; the thorax has the central black stripe straight, and not dilated behind; the sides are marked with two wide irregular black bands, broken at the suture; the scutellum has black margins, and is also covered on the disc with fine hairs; the abdomen has a central narrow stripe, and a series of straight transverse lines; it is also without discal setæ; the hind tibiæ are ciliated with longish setæ on their outer sides, as well as with a double row of very short erect bristles along their inner and front surfaces. Length, 8—9 mm. Very rare.

Sp. 3.—E. HISTRIO, Ztt.

This species closely resembles *E. festiva*, the chief point of difference being that the arista is only pubescent; on this account it was placed by Rondani in the genus *Chortophila*, and I followed his example in my annotated list, only putting it erroneously among the species of *Phorbia*. It may be distinguished from *H. festiva* by having one or two discal setæ on the sides of the abdominal segments, as well as by the subnude arista. Length, 7—10 mm. Not common.

Gen. XIII.—MYCOPHAGA, Rnd.

Gen. ch.—Eyes bare, remote in both sexes, but nearer together in the ♂ than in the ♀; antennæ long, with plumose arista; abdomen oblong and subcylindrical in the ♂; ovoid and depressed in the ♀; calyptra small, with equal sized scales; wings with the anal vein prolonged to the margin.

Sp. 1.—M. FUNGORUM, Dsv.

This fly occupies rather an anomalous position ; on account of the wide separation of the eyes in the ♂, it has usually been placed in the *Cœnosiæ* group, but in all its other characters it resembles the *Hylemyiæ.* The frontal space is black, and red in front; the antennæ are black, with the basal joints testaceous; the palpi are black; the thorax is grey with pale shoulder points; the scutellum is grey, with the apex yellow; the abdomen is reddish-yellow; the calyptra and halteres are pale; the legs are yellow, with black tarsi. The ♀ is very similar to the ♂.

Length, 8—9 mm. Not common.

END OF PART ONE.

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MDCCCXCVII.

With the Author's
Kind regards.

DESCRIPTIVE LIST

OF THE

BRITISH ANTHOMYIDÆ.

BY

R. H. MEADE, F.R.C.S.,

Mem. Soc. Entomol. de France.

Gen. XIV.—LASIOPS, Mgn.

Gen. ch.—Eyes hairy or downy in the male; arista subnude; thorax with three post-sutural bristles; abdomen depressed; calyptra small, with scales nearly or quite equal in size; wings with the third and fourth long veins parallel or slightly convergent, and anal vein prolonged to the margin; legs with the hind tibiæ ciliated.

This genus, as formed by Meigen, included those species which Rondani separated and placed in his genus *Trichopthicus*, now part of my genus *Hyetodesia*. Besides these, Rondani found a little fly with hairy legs as well as eyes, marked on the abdomen much in the same manner as the common *Anthomyia radicum*, L. This he named *L. anthomyinus*. Kowarz, who has also studied and monographed this little group, met with several other very similar species, three of which occur in Britain.

1 (4) Hind tibiæ ciliated along their hinder surfaces with an even row of short bristles.

2 (3) Thorax black, and indistinctly striped ....1. *ctenocnema*, Kz.

3 (2) Thorax grey, and distinctly striped.............................2. *Roederi*, Kz.

4 (1) Hind tibiæ with only a few bristles on the hinder surface...3. *Meadii*, Kz.

Sp. 1.—L. ctenocnema, Kz.

♂. Eyes contiguous, long haired; thorax with scutellum shining black, the front margin and sides of the former with white reflections; abdomen grey, oblongo-conical depressed, and pointed at the apex, which is black and shining; subanal appendages small, with two hairy projecting lobes; dorsum marked by a broad, black, longitudinal band, as well as with transverse stripes; calyptra pale brown, fringed with long yellow hairs; halteres yellow; wings yellowish-brown, with the third and fourth long veins decidedly convergent; legs with hind tibiæ

ciliated with bristles of even and moderate length along the whole of their externo-posterior surfaces, as well as with fine bristles or hairs on their internal and anterior sides. ♀. Grey, eyes only slightly downy; frontal space wide, with a central black stripe with pale grey sides; thorax light grey, with five pale brown stripes; abdomen grey, with a central stripe; legs simple.

Length, ♂, 4—5 mm.; ♀, 3 mm. Common.

Sp. 2.—L. Roederi, Kz.

This species differs from the last by having the thorax and scutellum grey instead of black, and by the former being marked by three and sometimes five stripes; the calyptra are whitish, fringed with yellow hairs; the wings have the third and fourth long veins nearly parallel; the legs are armed as in the former species. ♀. I do not know any characteristic point of difference between the female of this and of *L. ctenocnema*. Length, 4 mm. Not common.

Sp. 3.—L. Meadii, Kz.

This again is very similar in size and general characters to both the preceding species, but differs by having the eyes shorter haired; the thorax fuscous, with three distinct stripes; the calyptra brownish, fringed with black hairs; the wings with the third and fourth long veins quite parallel or slightly divergent; and the hind tibiæ with bristles only on the upper part of the hinder surface. ♀. Unknown to me. Rare.

Gen. XV.—ANTHOMYIA, Mgn.

Gen. ch.—Eyes bare, contiguous or subcontiguous in the male; arista pubescent or bare; epistome sometimes prominent; abdomen ovoid or oblong, and depressed; calyptra small, but with the lower scale always a little larger than the other; wings with the anal vein prolonged to the margin; legs always black or grey.

1 (5) Abdomen spotted.
2 (3) (4) Thorax marked with several large spots........................1. *pluvialis*, L.
3 (2) Thorax marked with two small spots ....2. *albicincta*, Fln.
4 (3) Thorax with only one rhomdoidal spot ....3. *pratincola*, Pz.
5 (1) Abdomen striped.
6 (7) Abdominal stripes even and flat ....4. *radicum*, L.
7 (6) Transverse stripes forming sulci or depressions ....5. *sulciventris*, Ztt.

Sp. 1.—A. pluvialis, L.

♂. Eyes subcoherent; arista subnude; thorax greyish-white, with five large black spots, two in front of the suture, and three behind it; scutellum white, with a large black spot on each side; abdomen grey, the basal segment with a black spot in the middle; the second, third, and fourth segments with a transverse row of three triangular spots, the bases of which are sometimes connected (particularly in the females), so as to form a toothed transverse stripe; apex shining black; subanal

processes small; calyptra and halteres pale; wings clear; legs with hind tibiæ ciliated along the outer sides with a row of nearly even short bristles, as well as by a few setæ in the middle of the inner surfaces. ♀. Very similar to the ♂, but has a wide grey frontal space, with a central black stripe, and two small decussating bristles. Length, 6 mm. Common.

Sp. 2.—A. ALBICINCTA, Fln.

This little species has the abdomen marked in the same manner as *A. pluvialis*, but the thorax is black, with two little white spots on the hinder part in front of the scutellum, which is black. Length, 4 mm. Very rare.

Sp. 3.—A. PRATINCOLA, Pz.

This is also closely allied to both the foregoing species, having the abdomen similarly marked; the thorax is, however, different, being greyish-white, and has a single black, elongated, rhomboidal spot in the centre behind the suture; the scutellum is black, with white edges; and the wings have the third and fourth long veins a little convergent. ♀. Frontal stripe wide, rufous in front; thorax light grey, immaculate; abdomen with three little black spots on each ring.
Length, 3—4 mm. Rare.

Sp. 4.—A. RADICUM, L.

♂. Eyes contiguous behind, frontal triangle often rufous; arista pubescent; epistome very prominent; thorax nigrescent, with three wide, black, indistinct stripes, between which are two or four grey lines; scutellum black; abdomen grey, oval, depressed, with a long central black stripe, and three rather wide transverse ones, dividing the back into six or eight small, square, grey patches; calyptra and halteres yellow; wings with the third and fourth long veins a little convergent; legs simple. ♀. Frontal space wide, and red in front; thorax grey, indistinctly striped; abdomen grey, with a long black line. Length, 4—5 mm. Very common.

Sp. 5.—A. SULCIVENTRIS, Ztt.

♂. Eyes coherent; antennæ short; arista pubescent; epistome slightly prominent; thorax black, with grey sides; abdomen hairy, dark grey, with a black longitudinal stripe, and four black transverse sulci or depressions; calyptra and halteres pale; wings slightly nigrescent; legs setose; hind tibiæ bare internally. ♀. Smaller than ♂, grey, and immaculate. Length, 4 mm. Common.

Gen. XVI.—CHORTOPHILA, Mcq.

ANTHOMYIA, p. Schn.
HAMMOMYIA, p. Rnd.
HYLEPHILA, p. Rnd.
ERYPHIA, p. Schn.

Gen. ch.—Eyes bare, contiguous, subcontiguous or subremote in the ♂, approximate or remote in the ♀; arista pubescent or bare; forehead and face more or less prominent; decussating frontal setæ

generally present; abdomen subcylindrical; calyptra small, with equal sized scales; wings with anal vein prolonged to the margin; legs always black or grey.

1	(8)	Forehead and face very prominent.	
2	(5)	Arista subnude.	
3	(4)	Outer cross vein of wing nearly straight	1. *buccata*, Fln.
4	(3)	Outer cross vein sinuous	2. *unilineata*, Ztt.
5	(2)	Arista subplumose or pubescent.	
6	(7)	Subanal male processes small	3. *albescens*, Ztt.
7	(6)	Subanal processes lobular and large	4. *trapezina*, Ztt.
8	(1)	Forehead and face but slightly prominent.	
9	(10)	Cross veins of wings clouded	5. *longula*, Fln.
10	(9)	Cross veins clear.	
11	(14)	Abdomen with a longitudinal central row of small subtriangular spots.	
12	(13)	Outer cross veins straight and upright	6. *striolata*, Fln.
13	(12)	Outer cross veins oblique	7. *cinerella*, Fln.
14	(11)	Abdomen without triangular spots.	
15	(18)	Abdominal anal segments large and incurved.	
16	(17)	Wings with costal veins ciliated	8. *curvicauda*, Ztt.
17	(16)	Costal veins simple, wings with base fuscous	9. *sepia*, Mgn.
18	(15)	Abdomen long, conical, and pointed in both sexes.	
19	(20)	Thorax striped	10. *sylvestris*, Fln.
20	(19)	Thorax unstriped	11. *Billbergi*, Ztt.

Sp. 1.—C. BUCCATA, Fln.

Eyes subcontiguous in both sexes; antennæ short and small; arista thickened at the base, subnude; forehead prominent, face projecting, silky white or yellowish, with dark reflections; palpi black; thorax whitish-grey, with paler sides and indistinct stripes; scutellum grey; abdomen pale grey, conico-cylindrical, with dark reflections, and an interrupted dorsal stripe; anal segments pale and inflexed; calyptra and halteres pale; wings clear, longitudinal veins parallel; outer cross veins oblique and nearly straight; legs with hind tibiæ armed with a few ciliæ on the inner sides. Length, 7—8 mm. Not common.

Sp. 2.—C. UNILINEATA, Ztt.

This species is very similar to *C. buccata*, but is usually smaller and more slender. The eyes are subapproximate in the ♂, and subremote in the ♀; the thorax is darker grey, and more distinctly striped than in *C. buccata*; the wings have the outer transverse veins very sinuous in the ♂, but nearly straight in the ♀, and the hind tibiæ are furnished with a loose tuft of hairs on their inner surfaces in the former sex. Length, 6 mm. Rare.

Sp. 3.—C. ALBESCENS, Ztt.
albula, Mgn.

This species varies much in size, there appearing to be two distinct varieties,

one nearly as large again as the other. It closely resembles *C. unilineata*, but may at once be known by the arista being hairy (almost subplumose); and the thorax being lighter in colour and unstriped. The ♀ closely resembles the ♂.

Length, 3—6 mm. Not common; found in sandy places.

Sp. 4.—C. TRAPEZINA, Ztt.
impudica, Rnd.
odontogaster ?, Ztt.
cinerea ?, Ztt., ♀.

♂. Eyes approximate, arista pubescent; face glistening white, and prominent, but shorter than in the three preceding species; thorax grey, with three rather indistinct stripes, sides light; abdomen subcylindrical, grey, with a longitudinal interrupted dorsal stripe sometimes forming a row of rather indistinct rhomboidal spots; ventral surface furnished with two large, projecting, hairy lobes, situated on the penultimate segment; calyptra and halteres pale; wings subfuscous, with the outer cross veins straight and upright; legs hairy, hind tibiæ internally subnude. ♀. Frontal stripe wide; thorax and abdomen pale and substriated. This species varies much in colour, and in the design on the abdomen, but may always be known by the large projecting ventral lobes and the straight and upright outer cross veins.

Length, 7 mm. Not rare.

Sp. 5.—C. LONGULA, Fln., not Mgn.

♂. Eyes coherent; forehead and face only slightly prominent; arista subnude; thorax grey, with two rather distant brown stripes; scutellum grey; abdomen grey, cylindrico-conical, with an interrupted dorsal stripe; calyptra white; halteres yellow; wings grey, with the cross veins nebulous; legs with hind tibiæ furnished with a few rigid setæ. ♀. Frontal space wide, yellow in front and grey behind.

This species has been confounded with *Hylemyia pullula*, Fln., which is the same as *H. longula*, Mgn., but they may be distinguished by the more hairy arista and depressed abdomen in the latter. Length, 4 mm. Rare.

Sp. 6.—C. STRIOLATA, Fln.

♂. Eyes approximate; arista pubescent, with a short thickened base; forehead and face rather prominent, the latter silky white; thorax dark grey, with three, and sometimes five, stripes; abdomen rather flattened, grey, with a dorsal row of small subtriangular spots, and four transverse striæ; subanal processes lobular and hairy, but not very large; calyptra and halteres pale; wings with cross veins nearly straight; legs with hind tibiæ furnished with a few bristles on their inner sides. ♀. Frontal stripe wide, and rufous in front. Length, 5—6 mm. Not rare.

In my Annotated List I confounded this species with *C. trapezina*, but they may be distinguished by the much larger subanal lobes, and the more cylindrical abdomen in the latter.

Sp. 7.—C. CINERELLA, Fln.
pusilla ?, Mgn.

♂. Eyes contiguous; arista pubescent; thorax and abdomen coated with pale

grey, dust-like scales (*cinereo-farinosi*), the former being indistinctly striped, and the latter, which is subcylindrical, marked with a row of small subtriangular spots down the back; anal segments small; calyptra and halteres pale; wings clear; legs simple. ♀. Frontal space wide, and red in front; abdomen conical, and thorax grey and subimmaculate. Length, 4 mm. Rare.

Sp. 8.—C. CURVICAUDA, Ztt.

♂. Eyes subcontiguous; forehead and face slightly prominent; arista subnude; thorax dull grey, indistinctly striped; abdomen greyish-black, thick and subcylindrical; anal segments large, globular, shining black, and inflexed; calyptra and halteres pale; wings subfuscous; costal vein ciliated along its whole length with short spines; legs hairy. ♀. Frontal space moderately wide, and subrufous; abdomen ovoid and pointed, shining black, with metallic lustre.

Length, 3 mm. Local.

Sp. 9.—C. SEPIA, Mgn.

This fly is something like *C. curvicauda*, but is larger. The ♂ has the eyes subcontiguous, the face prominent; the arista subnude; the thorax dark grey, indistinctly striped; the abdomen fuscous, thick, and subcylindrical, and marked with large, indistinct, subquadrate spots down the back; the anal segments are black, shining, inflexed, and connected with two ventral projecting hairy lamellæ; wings rather short, nigrescent at the base, with large costal spine, and a few short ciliæ along the basal third of the costa; legs hairy, with a few bristles in the middle of the inner sides of the hind tibiæ; calyptra white, halteres fuscous. ♀. Frontal space wide, with black central stripe and grey sides; thorax and abdomen dark grey.

Length, 4—5 mm. Not common.

Sp. 10.—C. SYLVESTRIS, Fln.

Eyes approximate in both sexes, though a little further apart in the ♀ than ♂; forehead and face slightly prominent; arista pubescent; thorax grey, with three irregular black stripes, the outer pair broad and crooked, and the central one faint and often divided; abdomen oblongo-conical, pointed in both sexes, with a broad interrupted dorsal stripe, and numerous minute hair spots or punctures; anal processes in ♂ small, shining black, and projecting; calyptra and halteres yellow; wings flavescent, with the third and fourth long veins divergent at the end; legs setose, hind tibiæ in the ♂ with several very long bristles on their outer sides, and subnude internally; front tarsi in the ♀ with all the joints thickened.

Length, 8—9 mm. Rare; found by Mr. Verrall in Scotland.

Sp. 11.—C. BILLBERGI, Ztt.

Very similar to the preceding species, but smaller; the eyes are subapproximate in both sexes, though rather wider apart in the ♀ than ♂; the face is more prominent than in *C. sylvestris*, and silky white; thorax shining black, unstriped, with pale grey sides; abdomen in ♂ oblongo-cylindrical, grey, with an interrupted black stripe, and projecting, small, black, shining apex, which is hairy beneath, with two

small lamellæ. The abdomen of the ♀ is pointed, and shining black; calyptra white; halteres yellow; legs with but few spines; hind tibiæ subnude, front tarsi of the ♀ with the second and third joints dilated;* the wings have the third and fourth long veins nearly parallel. Length, 6—7 mm. Rare.

Gen. XVII.—PHORBIA, Dsv.

ANTHOMYIA, p. Auct.
CHORTOPHILA, p. Mcq., Rnd.

Gen. ch.—Eyes bare; contiguous or subcontiguous in the male, remote in the female; arista tomentose or bare; face more or less prominent; decussating frontal setæ present; thorax with three post-sutural central bristles; abdomen depressed, oblong, or linear; calyptra small, with equal sized scales; wings with the anal vein prolonged to the margin; legs black.†

1 (2) Forehead and face very prominent..........................1. *arenosa*, Ztt.
2 (1) Forehead and face only slightly prominent.
3(17)(20) Thorax marked with three stripes.
4 (5) Hind femora tufted with hair at the base ....2. *floccosa*, Mcq.
5 (4) Hind femora untufted.
6 (9) Abdomen oblong.
7 (8) Abdomen with a rather wide, interrupted, longitudinal stripe... 3. *transversalis*, Ztt.
8 (7) Abdomen with a slender continuous stripe ....4. *pudica*, Rnd.
9 (6)(16) Abdomen conical, flat, and tapering.
10 (13) Hind tibia pectinated on the whole length of its inner side with a row of short even bristles.
11 (12) Middle metatarsi furnished with several long hairs upon their upper surfaces ....5. *trichodactyla*, Rnd.
12 (11) Middle metatarsi simple ....6. *cilicrura*, Rnd.
13 (10) Hind tibiæ without long even row of ciliæ.
14 (15) Abdomen with a straight, subcontinuous stripe, and small subanal processes ....7. *florilega*, Ztt.
15 (14) Abdominal stripe consisting of small triangular spots... 8. *seneciella*, Mde.
16 (9) Abdomen short and flat, legs piceous ....9. *intersecta*, Mgn.
17 (3)(20) Thorax with five stripes.
18 (19) Eyes of male subapproximate ....10. *discreta*, Mgn.
19 (18) Eyes of male contiguous....................................11. *neglecta*, Mde.
20 (3)(17) Thorax indistinctly striped or unstriped.
21 (34) Thorax black or dark brown.
22 (25) Antennæ very short.
23 (24) Costal and first longitudinal veins thick and black...12. *humerella*, Ztt.

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* Zetterstedt and Schiner both say by mistake that the males have the front tarsi dilated.
† In one species only (*P. intersecta*, Mgn.) they are partly piceous, or rufous.

24 (23) Costal veins simple, abdomen narrow and hairy......13. *muscaria*, Mgn.
25 (22) Antennæ of moderate length.
26 (29) Wings nigrescent or fuscous.
27 (28) Abdomen dark and indistinctly striped ....14. *lactucæ*, Bouché.
28 (27) Abdomen grey, with a line of triangular spots.........15. *dissecta*, Mgn.
29 (26) Wings yellow or pale brown.
30 Abdomen marked with a longitudinal, as well as with transverse, black stripes.
31 (32) Hind tibiæ with inner sides nude ....16. *ignota*, Rnd.
32 (31) Hind tibiæ with some internal ciliæ........................17. *exigua*, Mde.
33 Thorax with short, white, spot-like stripes ....18. *obscura*, Mcq.
34 (21) Thorax grey.
35 (36) Abdomen with a central row of small triangular spots... 19. *cepetorum*, Mde.
36 (35) Abdomen with a row of large subquadrangular marks... 20. *trapezoides*, Ztt.

Sp. 1.—ARENOSA, Ztt.

This well marked little species is rather aberrant, for by its prominent face, white colour, and habits, it resembles some of the species of *Chortophila*; and was placed in that genus in my Annotated List of the *Anthomyidæ*; but by the flattened form of the abdomen it clearly belongs to the genus *Phorbia*.

The ♂ has the eyes subcontiguous; the antennæ short; the arista subnude; the face white, and very prominent; the thorax whitish-grey, and unstriped; the abdomen pale grey, depressed, and linear, with an indistinct dorsal stripe, and large subanal processes; calyptra and halteres pale; legs with hind tibiæ ciliated with a row of short rigid bristles on their inner sides. ♀. Frontal space wide, and hind tibiæ simple, in other respects like the ♂.

Length, 4 mm. Not common; found in sandy places.

Sp. 2.—P. FLOCCOSA, Mcq.
floralis ?, Fln.

♂. Eyes subcontiguous; forehead and face slightly prominent; arista pubescent; thorax dark grey, marked with three rather broad and widely separated stripes; abdomen grey, oblongo-conical, flat, with a wide dorsal longitudinal stripe, gradually becoming narrower towards the apex, and also with black transverse lines; subanal processes small; calyptra and halteres pale; wings pale brown; legs with hind femora tufted beneath at the base with long hairs; hind tibiæ ciliated with bristles along the middle of their inner surfaces. ♀. Frontal space wide and grey, with a central black stripe, red in front; thorax and abdomen grey, and indistinctly striped. The larvæ feed upon different species of *Brassica*. Length, 6 mm. Very common.

Sp. 3.—P. TRANSVERSALIS, Ztt.

♂. Eyes coherent; forehead and face unprojecting; arista subpubescent; thorax dark grey, with three longitudinal, rather indistinct, black stripes, and pale sides; abdomen flat, oblong, rather short, grey, and hairy, with a longitudinal black

stripe, interrupted at the edges of the segments, where it is crossed by a transverse whitish line; anal appendages small; calyptra and halteres yellow; wings grey; legs with hind tibiæ subnude. I do not know the ♀.

Length, 5—6 mm. Not rare; has been bred from larvæ in the leaves of *Rumex acetosa.*

Sp. 4.—P. PUDICA, Rnd.

♂. Eyes contiguous; arista pubescent; thorax whitish-grey, marked by a central black stripe, and two wide lateral black bands; abdomen depressed, rather conical, of a pinkish or glaucous grey colour, with a slender, subcontinuous, tapering stripe; subanal appendages small; calyptra and halteres pale; legs with hind tibiæ armed with a few bristles towards the upper part of their inner surfaces. ♀. Undescribed. Length, 6 mm. Not uncommon.

Sp. 5.—P. TRICHODACTYLA, Rnd.

♂. Eyes subcontiguous; arista slightly pubescent; thorax light grey, with three indistinct stripes; abdomen narrow, flat, and tapering, with a dorsal interrupted stripe consisting of subtriangular spots; apex grey, with small ventral appendages; calyptra white; halteres yellow; wings clear; the fourth and fifth long veins slightly convergent; legs with the hind tibiæ pectinated with a row of suberect short bristles of even lengths along the whole inner surfaces; intermediate tarsi furnished with a few long hairs on the outer or upper surfaces of the first joint. I do not know the ♀. Length, 3—4 mm. Not rare.

Sp. 6.—P. CILICRURA, Rnd.

This species closely resmbles the last, and only differs by being usually a little larger; by being rather more distinctly marked on the thorax; and by having the middle metatarsal joints free from bristles; the hind tibiæ are ciliated in the same manner. ♀. Frontal space wide, and red in front; colour of the thorax and abdomen lighter than in the ♂, and less distinctly striped. The larvæ feed upon onions. Length, 4 mm. Very common.

Sp. 7.—FLORILEGA, Ztt.

This is another little species that is very similar in form and colour to the two preceding ones. The ♂ has the face and epistome slightly prominent; the eyes contiguous; the arista bare; the thorax yellowish-grey, with three indistinct brown stripes; the abdomen flat, narrow, and tapering, with very small subanal appendages; grey, and marked with a subcontinuous dorsal stripe of uniform width; calyptra and halteres pale; legs simple. ♀. Unknown.

Length, 3—4 mm. Not uncommon.

Sp. 8.—P. SENECIELLA, Mde.*

This little fly, which has been bred from different species of *Senecio*, is very similar to *P. florilega*, and has been mixed up with it. The chief points of dis-

* Bulletin de Soc. Entom. de France, May, 1892.

tinction between them are that the thorax is more distinctly striped in *P. sineciella*, and the abdomen has a longitudinal row of small triangular spots down the back, instead of a straight stripe as in *P. florilega*; the subanal appendages are also much larger in the former; the wings are subfuscous, and the legs simple. ♀. Pale grey, subimmaculate; frontal space wide, black behind, red in front.

Length, 4 mm. Found both in England and France.*

Sp. 9.—P. INTERSECTA, Mgn.

♂. Eyes contiguous; forehead and epistome slightly prominent; face white; antennæ very short, with second joint rather wider and longer than the third; arista short and slightly pubescent; palpi black; thorax dark brown, with grey sides, and three black stripes; abdomen short, thin, and flat, with the apex thickened, and furnished beneath with a small tuft of hairs, and a straight black stripe down the back; calyptra and halteres pale; wings with a yellow tinge; legs more or less rufous or piceous; front femora quite black, and front tibiæ only slightly piceous; posterior femora and tibiæ all piceous or rufous (the tibiæ are generally lighter than the femora), with the ends of the femora and bases of the tibiæ black; tarsi all black; hind tibiæ with inner sides subnude.

Length, 4—5 mm. I have only seen two ♂s of this well marked species, one captured by Mr. Billups at Woking, and the other by Mr. Beaumont at Pitlochry, N.B.

Sp. 10.—P. DISCRETA, Mgn.

♂. Eyes subapproximate; arista pubescent; thorax dark grey, with pale sides, and five dark stripes; abdomen narrow, flat, hairy, pale grey with brown reflections, and an interrupted dorsal stripe; subanal processes small; calyptra and halteres pale; wings fuscous; legs with a few long bristles in the middle of their inner surfaces. ♀. Unknown. Length, 5 mm. Not common.

Sp. 11.—P. NEGLECTA, Mde.†
sulcella ?, Ztt.

♂. Eyes large, closely contiguous; antennæ rather long, with arista subpubescent and thickened at the base; thorax grey, with five stripes, two of which are sometimes indistinct; abdomen narrow, pointed and hairy, the first segment short, the second much longer than the others, the third and fourth about equal, and the fifth (apical) pointed, black and shining; the back is dark grey, marked down the centre with three large subtriangular spots; calyptra and halteres yellow; wings grey; legs with hind tibiæ nude on the inner sides. ♀. Frontal space wide, with bright red stripe; thorax and abdomen marked like the ♂, but paler.

Length, 3 mm. Not uncommon.

Sp. 12.—P. HUMERELLA, Ztt.

♂. Eyes coherent; forehead and face slightly prominent; antennæ short;

* Mr. Hardy in the first vol. of the Scottish Naturalist (p. 25) very imperfectly described a small ♀ Anthomyd (which he had bred from the heads of *Senecio jacobææ*) by the name of *A. jacobææ*. This was probably the same species.

† Ent. Mo. Mag., March, 1883.

arista bare; mouth prominent; thorax dark grey, indistinctly striped, with pale sides; abdomen narrow, straight and flat, with an interrupted dorsal stripe dilated into subquadrangular spots, opposite to the edges of the segments; calyptra small and pale; halteres yellow, with the heads sometimes brown; wings with bases dark, and the costal and first longitudinal veins thick and black; legs with a few short bristles on the inner sides of the hind tibiæ. ♀. Frontal space wide, rufous in front; thorax yellowish-grey and unstriped; abdomen grey and pointed with an indistinct dorsal stripe. Length, 3 mm. Rare.

This little species closely resembles *Anthomyia sulciventris*, Ztt., but differs by having the calyptra smaller, with the scales quite equal in size; by the arista being less pubescent, the mouth more prominent, and the abdomen without the transverse depressions.

Sp. 13.—P. MUSCARIA, Mgn.
brevicornis ?, Ztt.

This is a little narrow, black and very hairy fly; the ♂ has the eyes contiguous; the antennæ very short, the second joint being almost as long as the third, which is short and rounded; the forehead and mouth are both prominent; palpi long, hairy, and dilated at the ends; thorax black and indistinctly striped; abdomen long, narrow, black, marked with a longitudinal and transverse stripes, and with anal segment small, black and shining; wings grey; legs hairy, but hind tibiæ bare internally. ♀. Grey and frontal stripe black.

Length, 4 mm. Not common; appears early in the spring.

Sp. 14.—P. LACTUCÆ, Bouché.
incognita, Rnd.

This species is characterized by being of a deep rich brown colour, with dark brown wings. ♂. Eyes contiguous, with frontal triangle red; arista pubescent; cheeks with a rufous tinge; thorax shining black, grey upon the shoulders and sides; abdomen oblong, flattened, of an uniform brown colour when viewed from before; but grey with brown reflections and an interrupted dorsal stripe when looked at from behind; calyptra and halteres pale; wings nigrescent; legs rather piceous. ♀. Grey and unstriped; frontal space wide, with red stripe; wings clear, with yellow roots. Length, 6 mm. Not very common.

Sp. 15.—P. DISSECTA, Mgn.

♂. Eyes subcontiguous; arista subnude; thorax dark grey with pale shoulders and three indistinct dark stripes; abdomen oblong, narrow and flattened, hairy, light grey, and marked down the back with a row of triangular spots, the bases of which are dilated into transverse bands opposite to the upper edge of each segment; calyptra and halteres pale; wings brown; outer cross veins straight and upright; legs with a few short bristles in the middle of the inner surfaces of the hind tibiæ. ♀. Undescribed. Length, 4 mm. Not common.

Sp. 16.—P. IGNOTA, Rnd.

♂. Eyes very large and contiguous, nearly covering the whole side of the head;

antennæ of moderate length, with arista subnude; thorax shining black, with three rather indistinct stripes; abdomen flat, tapering, grey, with a glaucous tinge; marked with a longitudinal dorsal band and with straight transverse striæ; subanal processes very small; calyptra small and with halteres pale; wings grey (sometimes fuscous), with the fourth and fifth long veins slightly divergent, and cross veins straight and upright; legs with hind tibiæ subnude internally. ♀. Grey, frontal space wide, with black stripe; thorax and abdomen indistinctly striped.

Length, 3 mm. Very common.

Sp. 17.—P. EXIGUA, Mde.*

♂. Eyes contiguous; face and mouth slightly prominent; antennæ shortish; arista bare, with an oval, shining, black, thickened protuberance at the base; thorax dull grey, with three and sometimes five rather indistinct black stripes; abdomen hairy, oblong, narrow and flat, marked by an interrupted longitudinal band and cross transverse lines; apical segment large, projecting and grey; subanal processes large, consisting of two pairs of lamellæ, one projecting backwards and the other forwards; calyptra small, subfuscous; halteres brown; wings pale brown, with the costal and first longitudinal veins thick and black; legs with hind tibiæ ciliated with a few bristles on the middle of their inner surfaces. ♀. Unknown.

Length, 2 mm. Very rare.

Sp. 18.—P. OBSCURA, Mcq.

♂. Eyes coherent; antennæ rather long, with pubescent arista; forehead and mouth slightly prominent; thorax black, with front margin and shoulders glistening white; the front edge is intersected by three abbreviated black stripes, between which appear two irregular bright white spots, giving a peculiar and characteristic appearance to the fly. The abdomen is oblong, rather narrow, flat and glabrous; grey, with a wide interrupted black dorsal stripe, and three transverse brown bands which cover the upper halves of the second, third and fourth segments; anal segments small; calyptra and halteres yellow; wings with bases yellow; legs setose; hind tibiæ subnude internally. ♀. Unknown. Length, 4 mm. Very rare.

Sp. 19.—P. CEPETORUM, Mde.†
ceparum ?, Mgn. and Curtis.

♂. Eyes contiguous, face slightly prominent; epistome flat; antennæ of moderate length; arista thickened and pubescent at the base, but subnude in the middle and at the apex; thorax bright yellow-grey, with four indistinct stripes, and four rows of black bristles; abdomen oblong, narrow, grey, clothed with black hairs, and showing silvery-white reflections when viewed from behind; dorsum marked down the centre with a row of narrow, subtriangular, black spots; anal segment grey, small and pointed; subanal appendages large and hairy; calyptra and halteres pale; wings hyaline; legs sometimes rather piceous; hind tibiæ with a few short bristles along the middle and upper part of their inner sides. ♀. Very like the ♂, but paler in colour and less distinctly striped; eyes with wide central space and red stripe. Length, 6 mm. Not uncommon; the larvæ live in onions.

* Ent. Mo. Mag., March, 1883. † Ent. Mo. Mag., March, 1883.

Sp. 20.—P. trapezoides, Ztt.

♂. Eyes subcontiguous; forehead and mouth rather prominent; antennæ of moderate length, with arista pubescent; face white, with dark reflections; thorax yellowish-grey, with three rather pale brown stripes; abdomen linear depressed, grey, with a series of rather large subquadrate spots in the centre of the segments; apical joint small and glistening black; calyptra and halteres yellow; wings slightly brown, with the fourth and fifth long veins parallel, and the outer cross ones straight and a little oblique; the two branches of the first longitudinal vein also are thick and black; legs with the hind tibiæ nude on the inner sides. ♀. Unknown to me. Length, 5 mm. Rare.

Gen. XVIII.—PEGOMYIA, Dsv., Mcq.

Anthomyia, p., Mgn., Schin., Rnd.
Chortophila, p., Rnd.

Gen. ch.—Eyes mostly contiguous or subcontiguous in the male, remote in the female; arista pubescent or bare; frontalia with little decussating bristles; thorax mostly with three post-sutural setæ; abdomen narrow and subcylindrical, or oblong and depressed in the male, and ovato-conical in the female; calyptra variable in size, with the scales equal or subequal; wings with anal vein prolonged to the margin; legs always wholly or partly red or yellow, and the abdomen mostly rufous or testaceous.

1 (10) Abdomen wholly or principally black or grey.
2 (3) (9) Legs with all the femora and tibiæ pale ....1. *setaria*, Wdm.
3 (2) (9) Legs with fore femora partly nigrescent.
4 (14) Palpi pale with black tips.
5 (8) Antennæ black.
6 (7) Abdomen light grey, and immaculate in the ♀ ......2. *conformis*, Fln.
7 (6) Abdomen with last two segments red in the ♀ ......3. *hæmorhoum*, Ztt.
8 (5) Antennæ with basal joints pale ....4. *hyoscyami*, Pz.
9 (2) (3) Legs with tibiæ only pale.......................................5. *betæ*, Curtis.
10 (1) Abdomen red or yellow.
11 (26) Thorax principally black or grey.
12 (27) Calyptra of moderate size, with the scales unequal.
13 (23) Scutellum black or nearly black.
14 (17) Palpi black.
15 (16) Abdomen oblong and thick ....6. *rufipes*, Fln.
16 (15) Abdomen linear.
17 (14) Palpi quite yellow.
18 Abdomen marked with black transverse lines.
19 (20) Abdomen subcylindrical in the ♂; posterior tarsi dilated in the ♀ ... 7. *latitarsis*, Ztt.
20 (19) Abdomen depressed.
21 (22) Wings with outer cross veins straight ....8. *transversa*, Fln.

22 (21)	Wings with outer cross veins sinuous	9. *Winthemi*, Mgn.
23 (13)	Scutellum red or yellow.	
24 (25)	Palpi yellow with black tips	10. *fulgens*, Mgn.
25 (24)	Palpi quite yellow	11. *ephippium*, Ztt.
26 (11)	Thorax pale	12. *silacea*, Mgn.
27 (12)	Calyptra small with equal sized scales.	
28 (43)	Thorax more or less black or grey.	
29 (37)	Scutellum black.	
30 (36)	Palpi black.	
31 (35)	Antennæ with all the joints black.	
32 (33)	Eyes of male contiguous	13. *transgressa*, Ztt.
33 (32)	Eyes of male subcontiguous	14. *versicolor*, Mgn.
34	Eyes remote in both sexes	15. *rotundicornis*, Ztt.
35 (31)	Antennæ with basal joints pale	16. *exilis*, Mgn.
36 (30)	Palpi yellow with black ends.	
37(29)(38)	Scutellum partly or wholly yellow	17. *tenera*, Ztt.
38 (37)	Scutellum grey	18. *nigritarsis*, Ztt.
39 (36)	Palpi quite yellow.	
40 (41)	Abdomen subcylindrical, scutellum grey	19. *bicolor*, Wdm.
41 (40)	Abdomen depressed, scutellum yellow.	
42	Posterior femora with black rings	20. *flavipes*, Fln.
43 (28)	Thorax as well as abdomen yellow	21. *vittigera*, Ztt.

Sp. 1.—P. SETARIA, Wdm.

♂. Eyes subcontiguous; arista bare; antennæ and palpi black; thorax pale grey with black reflections and four black stripes, the lateral ones being broad and broken; abdomen oblongo-conical, subcylindrical, but slightly flattened, grey, with some dark reflections, numerous little black hairs, and a longitudinal dorsal stripe; calyptra white; halteres yellow; wings with yellow roots; the fourth and fifth long veins slightly divergent, and the outer cross veins rather oblique and sinuous (Meigen says they are straight); legs, with the exception of the tarsi, which are black, pale red. ♀. Very similar to ♂; eyes not very remote; frontal stripe black, rufous in front and bordered by a grey stripe; thorax rather indistinctly striped; abdomen ovoid, grey, with some dark tessellations, and a faint dorsal stripe; wings with the fourth and fifth veins rather remote and slightly divergent. Length, 6 mm. Rare.

Sp. 2.—P. CONFORMIS, Fln.

♂. Eyes contiguous; face rather prominent; antennæ black; palpi yellow with black tips; thorax dark grey, indistinctly striped; abdomen narrow, subcylindrical, light grey, with a faintly marked dorsal stripe and large projecting subanal appendages of a reddish colour; calyptra and halteres pale; wings grey; legs yellow, with the exception of the fore femora and the tarsi, which are black. ♀. Face more prominent than in the ♂, and together with the forehead, cheeks and basal joints of the antennæ, bright yellow; thorax and abdomen light grey and immaculate; legs with all the femora and tibiæ yellow. Length, 4—5 mm. Rare.

I have both sexes, which were bred by Mr. Inchbald from larvæ mining the leaves of *Arctium lappa*.

Sp. 3.—P. HÆMORRHOUM, Ztt.

♂. Eyes subcontiguous; forehead prominent; antennæ and palpi black; thorax grey, indistinctly striped; abdomen grey, subcylindrical, unstriped, but showing some dark reflections; anal segments grey and incurved, with two projecting black processes; wings with bases yellow; legs testaceous or yellow, with the exception of the bases of the fore femora and the tarsi, which are black. ♀. Closely resembles that of *P. conformis*, but differs by having the two last abdominal segments red or yellow; the palpi are yellow with black tips, the antenna have the basal joints sometimes pale; the legs have the fore femora darker than in the ♂.

Length, 4—5 mm. Not uncommon; ♀ more common than ♂.

Sp. 4.—P. HYOSCYAMI, Pnz.
chenopodii, Rnd.

♂. Eyes subcontiguous; frontal triangle mostly red; antennæ with two basal joints rufous; palpi yellow with black tips; thorax and scutellum grey and unmarked; abdomen grey, with the anal segment luteous; dorsum marked with a longitudinal row of small triangular spots; calyptra white; halteres yellow; legs pale, with the exception of the tarsi and part of the fore femora, which are black. ♀. Similar to ♂, except by the wide frontalia and the absence of black on the fore femora. The abdomen is sometimes subtestaceous, when it corresponds more closely with the description of *P. chenopodii*, Rud. Length, 4 mm. Rare.

The larvæ are said to feed upon the leaves of Henbane, I have bred the flies from those of garden beet.

Sp. 5.—P. BETÆ, Curtis.*
sulcans? Rnd., ♂.
effodiens? Rnd., ♀.

♂. Eyes subcontiguous; frontal triangle fuscous; palpi yellow, with black ends; antennæ black; thorax dark grey, indistinctly striped; abdomen grey, with a longitudinal dorsal row of small triangular black spots; calyptra and halteres pale; wings clear; legs with femora and tarsi black, and tibiæ testaceous or piceous. ♀. Frontal stripe rufous, posterior femora usually pale. The larvæ mine the leaves of beet, mangle, &c. Length, 4—5 mm. Common.

Sp. 6.—P. RUFIPES, Fln., ♂.

♂. Eyes coherent; forehead and face flat; frontal triangle black; antennæ rather long, black, with nude arista; palpi black, hairy, and somewhat clavate; thorax black, indistinctly striped; scutellum black; abdomen oblong, flat, rufous, with an interrupted dorsal stripe, and indistinct transverse lines; anal segments small; calyptra and halteres yellow; wings with the fourth and fifth longitudinal veins slightly divergent at the extremities; legs, with the exception of the tarsi (which are black) yellow; the fore femora are sometimes piceous. ♀. Resembles the ♂, but the palpi are rather more clevate and hairy, the abdomen is suboval and pointed,

* Journal of Royal Agricul. Soc., Vol. viii, pt. ii, p. 412.

ochreous, and with distinct transverse stripes. The female has not been previously described, and has been supposed to be identical with *A. viduata*, Ztt.; they are, however, quite distinct, and the latter is no doubt the ♀ of *Homalomyia hamata*.

Length, 5 mm. Rare.

Sp. 7.—P. LATITARSIS, Ztt.

♂. Eyes coherent; antennæ rather short and wide, with the basal joints rufous; arista subnude; palpi yellow; thorax fuscous, substriated; abdomen narrow, reddish-yellow, with black transverse incisions; scutellum grey, with apex yellow; calyptra with scales unequal, and halteres yellow; wings subfuscous; legs yellow, with tarsi black. ♀. Eyes widely separated and frontal stripe mostly black; in other respects like the ♂, with the exception of having the last three joints of the four posterior tarsi dilated. Length, 4—5 mm. Rare.

Sp. 8.—P. TRANSVERSA, Fln.

♂. Eyes closely coherent; antennæ black, with the basal joints rufous; palpi yellow; thorax pale grey, subimmaculate; scutellum grey, with the apex tinged with yellow; abdomen luteous; subpellucid, with black, transverse incisions; calyptra pale, rather small, but with unequal scales; wings with the outer cross veins nearly straight and upright; legs yellow, with black tarsi. ♀. Like the ♂, with the exception of the eyes being widely separated, with a yellow frontal stripe.

Length, 5—6 mm. Not common.

Sp. 9.—P. WINTHEMI, Mgn.

This species closely resembles the last, and they have sometimes been confounded together; it chiefly differs by having the calyptra larger with the scales more unequal, and by the cross veins of the wings being more oblique and sinuous. Rare.

Sp. 10.—P. FULGENS, Mgn.
limbatella, Ztt.

♂. Eyes closely coherent; antennæ black, with the basal joints rufous; palpi yellow, with black tips; frontal triangle yellow; thorax with the disc pale grey, and the shoulders and sides testaceous; scutellum yellow; abdomen linear, depressed, yellow, with apex brown; calyptra and halteres pale; legs yellow, except the tarsi, which are black, with sometimes a faint brown ring round the end of the posterior femora. ♀. Frontal space wide, and yellow in front; abdomen with transverse black incisions. Length, 5—6 mm. Rare.

Sp. 11.—P. EPHIPPIUM, Ztt.

♂. Eyes coherent; antennæ black, with basal joints pale; palpi yellow; thorax reddish-brown on the dorsum, covered with grey tomentum; the front margin, shoulders and sides being pale yellow; scutellum yellow; abdomen oblong, narrow and flat, testaceous, pellucid at the base, nigrescent at the apex, and furnished beneath with large, black, globular processes; calyptra and halteres pale, the former

being small but slightly unequal; legs yellow, with the tarsi black, as well as a patch on the upper surfaces of the end of the femora. ♀. Eyes not very widely separated; abdomen, suboval and pointed. Length, 4—5 mm. Rare.

Sp. 12.—P. SILACEA, Mgn., Schin.
diaphana, Fln., Ztt., Rnd.

♂. Eyes contiguous; face yellowish-white; frontal triangle yellow; antennæ with all joints yellow; arista pubescent; palpi pale; thorax dull yellowish-white, lighter in front, and unstriped; calyptra and halteres pale, scales of the former unequal in size; abdomen small, narrow and flat, dull yellow, and, when viewed in some lights, with a wide interrupted dorsal stripe, as well as transverse dark lines; hind edges of the segments bristly; wings with the outer transverse veins very oblique and sinuous; legs yellow, with the exception of the four terminal joints of the tarsi, which are black. ♀. Eyes widely separated; frontal stripe yellow; third joint of the antennæ black; wings with the cross veins much less oblique and sinuous than in the ♂. Length, 6 mm. Not common.

Sp. 13.—P. TRANSGRESSA, Ztt.

♂. Eyes contiguous; frontal triangle red; antennæ and palpi black; thorax grey, indistinctly striped; abdomen fusco-ferruginous, linear and depressed, with large yellow complicated subanal processes; calyptra white, small, with equal scales; halteres yellow; legs testaceous, with the exception of the tarsi and bases of the front femora, which are black. ♀. Eyes moderately separated; frontal space with a central stripe black behind, and red in front; abdomen rufous, with indistinct cross stripes; legs like the ♂.

Length, 3—4 mm. Very rare. Found by Miss Prescott-Decie in S. Devon.

Sp. 14.—P. VERSICOLOR, Mgn.

♂. Eyes subcontiguous; antennæ and palpi black or grey; thorax blue-grey, with whitish shoulders; scutellum grey; abdomen narrow, reddish-yellow, with dark reflections and indistinct dorsal stripe; calyptra and halteres pale; wings with outer cross veins straight; legs yellow, with dark tarsi. ♀. Frontal stripe yellow; abdomen elliptical and flat, pale yellow. Length, 4 mm. Not uncommon.

Sp. 15.—P. ROTUNDICORNIS, Ztt.

♂. This is an aberrant species, peculiar by having the eyes separated by a considerable interval in both sexes. The antennæ are short, with the third joint orbicular, and the arista long and bare; the thorax is grey; the abdomen very narrow, depressed, and reddish-brown; the calyptra are small and white; the halteres yellow with a large knob; the legs have the front femora dark, as well as the ends of the tarsi; all the other joints are yellow. ♀. Very similar to ♂, but has a fusiform abdomen. Mr. Dale sent me a pair of this peculiar species for identification in 1877. Length, 4 mm. Rare.

Sp. 16.—P. EXILIS, Mgn.

This species closely resembles *P. versicolor* and *P. bicolor*. The eyes of the ♂

are subcontiguous; the antennæ have the two basal joints yellow; the palpi are black; the thorax is bluish-grey; the abdomen is narrow, straight, testaceous, with an indistinct dorsal stripe, and thick bulbous apex; calyptra and halteres pale yellow; legs yellow, with the tarsi dark, and the front femora grey on the upper surface. ♀. Has the abdomen subovate and pointed.

Length, 4 mm. Rare; I bred a specimen from larvæ in the leaves of *Heracleum sphondilium.*

Sp. 17.—P. TENERA, Ztt.

♂. Eyes coherent; antennæ black, basal joints sometimes subrufous; palpi yellow, with black ends; thorax grey, sometimes with a reddish or livid tinge; scutellum partly or wholly testaceous; abdomen linear, compressed, hairy, brownish-yellow, with terminal segments dark and thick; calyptra and halteres pale; legs with the femora, coxæ, and tibiæ yellow, and tarsi fuscous; the posterior femora have sometimes a dark ring round the extremity. ♀. Eyes with the ocular space moderately wide, and red in front; thorax with sides testaceous; basal joints of antennæ rufous; abdomen lanceolate, ferruginous, with indistinct transverse incisions and dorsal stripe. Length, 4 mm. Rare.

Sp. 18.—P. NIGRITARSIS, Ztt.
fulgens ?, Schin.

♂. Eyes contiguous; frontal triangle mostly red; antennæ black, with two basal joints red; palpi yellow, with black tips; thorax blue-grey; abdomen narrow, depressed, red, with apex dark; scutellum grey; calyptra small and pale, with scales equal; halteres yellow; legs yellow, with the upper surfaces of the front femora grey, and tarsi black. ♀. Very similar to ♂; forehead yellow; abdomen ovate and oblong. Length, 5—6 mm. Not uncommon; the larvæ feed in dock leaves.

Sp. 19.—P. BICOLOR, Wdm.
mitis, Mgn.

♂. Eyes subcontiguous; forehead and face rather prominent; frontal triangle black; antennæ black, with basal joint sometimes rufous; palpi quite yellow; thorax light grey; abdomen yellow, straight, and subcylindrical; scutellum grey; legs with the tarsi and front femora black; all other joints yellow. ♀. Like ♂, only has a wide frontal space, sometimes rufous in front; abdomen ovato-lanceolate; legs yellow, with only the tarsi black. Length, 5 mm. Common.

Sp. 20.—P. FLAVIPES, Fln.

♂. Eyes coherent; antennæ black, with basal joints pale; forehead flat; palpi yellow (sometimes darkened at the ends); arista subpubescent; thorax dark grey, with the dorsum sometimes fuscous; abdomen narrow, compressed, livid, and subpellucid, substriated, with white reflections; anal segments thick; legs yellow, with the tarsi fuscous, and with a dark ring round the ends of the posterior femora. ♀. Undescribed. Length, 4—5 mm. Rare.

Sp. 21.—P. VITTIGERA, Ztt.

This fly closely resembles *P. flavipes*, having the posterior femora annulated in the same way; it differs, however, by the thorax being pale (rufo-testaceous) as well as the abdomen, and marked with a central grey stripe. ♀. Very similar to the ♂.

Length, 4 mm. Not common.

I suspect that this is only a variety of *P. flavipes*.

Gen. XIX.—PIEZURA, Rnd.

Gen. ch.—Head smooth and semicircular; forehead and face flat; eyes large and bare, subcontiguous in the male, and subremote in the female; antennæ long, the third joint being about three times the length of the second; arista plumose; calyptra of moderate size, the lower scale being distinctly longer than the upper; abdomen depressed, with the anal segment distinct; wings with the anal vein shortened, and the axillary vein curved towards its extremity; legs simple.

Sp. 1.—P. PARDALINA, Rnd.

♂. Eyes subapproximate, divided by a double white stripe, which extends upwards to the black ocellar triangle; antennæ with the first two joints yellow, and the third grey; palpi rufous; thorax pale slate-grey, with a wide, central, longitudinal stripe, and two lateral, somewhat semilunar spots, one over the base of each wing; shoulders yellow; scutellum with base grey and apex yellow; calyptra white; halteres yellow; abdomen luteous, with a subdistinct, narrow, interrupted, black dorsal stripe, which extends over the three last segments; the sides of which are also blackened; anal appendages large, globular, and yellow; legs yellow, with the exception of the tarsi, which are black. ♀. Has the frontal stripe grey, but in other respects resembles the ♂. Length, 6 mm. Not common.

Gen. XX.—HOMALOMYIA, Bouché.

Gen. ch.—In the shape of the head and venation of the wings this genus closely resembles *Piezura*; it differs, however, by having the arista nude or subnude, instead of plumose; and by the calyptra being smaller, with the scales equal, or only slightly unequal in size; the abdomen is mostly flattened and elliptical in the male, and marked with a series of longitudinal, wide, triangular marks. The legs have the middle tibiæ mostly tuberculated or thickened towards the extremity, and ciliated with hairs. The little decussating frontal setæ are absent.

The group, which includes *Piezura* and *Cœlomyia*, as well as *Homalomyia*, is well marked and peculiar; the shape of the head, and the venation of the wings distinctly separating it from the neighbouring

genera. It contains a considerable number of species, some of which are difficult to define. Herr v. Stein has lately published an elaborate and exhaustive monograph upon the European species,* which I have found very useful while drawing up my short abridged descriptions of the British examples.

1 (8) Legs yellow; the hind tibiæ at least rufous.
2 (5) Middle coxæ of the ♂ with a strong spine beneath.
3 (4) Posterior femora yellow ....1. *hamata*, Mcq.
4 (3) Posterior femora black ....2. *fuscula*, Fln.
5 (2) Middle coxæ without spines.
6 (7) Abdomen partly yellow and translucent ....3. *pretiosa*, Schin.
7 (6) Abdomen not yellow ....4. *pallitibia*, Rnd.
8 (1) Legs black, with the exception of the knees and upper part of the front tibiæ, which are sometimes yellow.
9 (15) Middle coxæ with a spine on the under surface.
10 (13) Front tibiæ with a conspicuous tuft of hairs.
11 (12) Middle tibiæ with a thick tubercle below the middle...5. *manicata*, Mgn.
12 (11) Middle tibiæ gradually thickened towards the end ....6. *monilis*, L.
13 (10) Front tibiæ without a tuft of hairs.
14 Middle tibiæ with strongly projecting tubercles ....7. *scalaris*, F.
15 (9) Middle coxæ without spines.
16 (17) Abdomen partly yellow and translucent..................8. *canicularis*, L.
17 (16) Abdomen grey.
18 (24) Middle metatarsus with a spine at the base.
19 (20) Hind tibiæ ciliated with long hairs down the whole of the inner-side... 9. *armata*, Mgn.
20 (19) Hind tibiæ with only the ordinary bristles.
21 (22) Calyptra and halteres black (small species)..................18. *aeria*, Ztt.
22 (21) Calyptra and halteres brown or yellow (middle sized species).
23 Eyes closely contiguous, hind femora with a row of long bristles near the end ....11. *umbrosa*, Stein.
24 (18) Middle metatarsus without a spine.
25 (26) Middle tibia with a distinct tubercle ....12. *coracina*, Lw.
26 (25) Middle tibia without a tubercle.
27 (28) Hind femur with a fasciculus of hairs near the apex... 13. *Kowarzii*, Verr.
28 (27) Hind femur without a fasciculus.
29 (30) Lower third of the middle tibia distinctly, but not greatly, thickened on the inner side ....14. *Verrallii*, Stein.
30 (29) Middle tibiæ quite straight, or with more than the lower third thickened.
31 (38) Calyptra with equal sized scales.
32 (33) Hind tibiæ without præapical setæ ....15. *sociella*, Ztt.
33 (32) Hind tibiæ with præapical setæ.
34 (35) Calyptra yellow; abdominal stripe without marked triangular dilatations... 16. *similis*, Stein.

* Berliner Entom. Zeitschrift., Bd. xi, 1895.

35 (34) Calyptra black or brown, abdomen with triangular marks.

36 (37) Abdominal anal segments with two black lamellæ (a small black species)... 17. *parva*, Stein.

37 (36) Anal segments without black lamellæ, abdomen narrow, and of a bluish colour ....18. *serena*, Fln.

38 (31) Calyptra with unequal sized scales.

39 (42) Middle tibiæ with two bristles or more on the outer side.

40 Colour shining blue-black, abdominal marks indistinct... 19. *corvina*, Verr.

41 (42) Middle tibiæ with three or four bristles on the outer side, and abdomen with broad triangular marks ....20. *polychæta*, Lw.

42 (39) Middle tibiæ with only one bristle on the outer side.

43 (47) Middle tibiæ ciliated with very short close hairs along the whole of their inner surfaces.

44 (45) Subanal appendages in the ♂ large and prominent...21. *glaucescens*, Ztt.

45 (44) Subanal appendages of the ordinary size.

46 Hind tibiæ with long hairs and bristles on both sides... 22. *incisurata*, Ztt.

47 (43) Pubescence on the inner side of the middle tibiæ loose, and lengthening towards the extremity.

48 (49) Hind tibiæ furnished with a series of bristles of moderate and even lengths along the whole of their outer surfaces ......23. *mutica*, Ztt.

49 (48) Hind tibiæ with only the ordinary bristles ; knees yellow... 24. *genualis*, Stein.

LEGS WITH HIND TIBIÆ AT LEAST YELLOW.

Sp. 1.—H. HAMATA, Mcq.

aprica, Hal.
triplasia, Mgn.
viduata, Ztt., ♀.

♂. Eyes approximate; antennæ and palpi black; arista nude; thorax with scutellum dark grey, with shoulders and sides lighter, and four indistinct stripes; abdomen grey, and sometimes subtestaceous, with a central row of large triangular grey spots, sometimes rather indistinct; anal segments small and rufous; calyptra and halteres yellow; wings rather flavescent; legs with the four posterior femora and tibiæ yellow; the front femora and tibiæ, and all the tarsi, grey or black; there is a large black spine at the base cf each middle coxa. ♀. Eyes subremote; frontal stripe black; abdomen immaculate, and generally more rufous than in the ♂; legs yellow, with the exception of the tarsi, which are black.

Length, 9—10 mm. Not uncommon.

Sp. 2.—H. FUSCULA, Fln.

floricola, Mgn., ♂.
cilicrura, Rnd.

♂. Eyes subapproximate; frontal stripe black; antennæ and palpi black; arista subnude; thorax black, with grey sides; abdomen dark grey, with an inter-

rupted, straight, dorsal stripe; calyptra and halteres dark yellow; wings dark grey, with yellow roots; legs black, with the exception of the hind tibiæ, which are rufous or piceous, and ciliated on both sides; coxæ with four spines, two at the bases of the middle ones, and two smaller at the bases of the front ones. ♀. Eyes subremote, the frontal space only twice as wide as that in the ♂; frontal stripe black; abdomen dark grey and immaculate; wings pale grey; legs with hind tibiæ simple and rufous, as in the ♂. Length, 6 mm. Common.

Sp. 3.—H. PRETIOSA, Schin.
Roserii, Rnd.

♂. Eyes contiguous; antennæ and palpi black; thorax shining, metallic, brownish-black, with shoulders and sides white; scutellum brown, with reddish margin; abdomen pale yellow and translucent, with the apex black, and the dorsum marked with indistinct triangular marks; calyptra and halteres pale; wings tinged with yellow; legs yellow, with the exception of the tarsi and the extremities of the posterior femora, which are black or brown. ♀. Eyes moderately separated; frontal stripe fuscous; base of antennæ rufous; thorax brown, with the shoulder points and hinder part of the dorsum, with the greater part of the scutellum, yellow and translucent; abdomen uniformly rufous, but not translucent.

Length, 4—5 mm. Rare.

Sp. 4.—H. PALLITIBIA, Rnd.

♂. Eyes large, contiguous; antennæ and palpi black; thorax with scutellum black-brown; abdomen grey, with brown reflections and rather indistinct triangular marks; calyptra and halteres yellow; wings brownish-yellow; legs with femora and tibiæ brownish-yellow, and the tarsi black. ♀. Frontal space one-third of the width of the head; median stripe rufous; arista subpubescent; abdomen dark grey and indistinctly striped; legs as in the ♂. Length, 4—5 mm. Rare.

LEGS BLACK (KNEES SOMETIMES YELLOW).

Sp. 5.—H. MANICATA, Mgn.

♂. Eyes subcontiguous; antennæ and palpi black; thorax with scutellum shining black; abdomen bluish-grey, with a longitudinal row of wide triangular marks (similar to those in *H. scalaris**); calyptra and halteres yellow; wings greyish, with the fourth and fifth long veins a little convergent; legs black, with the exception of the basal halves of the front tibiæ, which are yellow, thickened at the apices, and furnished with a characteristic tuft of hairs; the middle coxæ have each a long spine at the base; and the middle tibiæ have a large projecting tubercle on the inside, below the middle, which is covered with short hairs. ♀. Very similar to ♂, but has the frontal space wide and brown and the thorax greyish; legs simple; front tibia half yellow, like the ♂.

Length, 6—7 mm. Not very common.

* This may be considered as the typical species.

Sp. 6.—H. MONILIS, Hal.

This species closely resembles the last, and chiefly differs by being smaller and by having the middle tibiæ only thickened a little towards the apex, instead of being furnished with a distinct tubercle or protuberance. Length, 4—5 mm. Very rare.

Sp. 7.—H. SCALARIS, F.
saltatrix, Dsv.
manicata, Mcq.

♂. Eyes subcontiguous; antennæ and palpi black; thorax with scutellum greyish-black; the former with sides lighter, and indistinct stripes; abdomen flat and grey, with a row of large, broad, triangular marks down the centre of the dorsum; subanal segments small; calyptra and halteres pale; wings grey, with the fourth and fifth veins distinctly convergent; legs black, with the knees generally yellow, as well as the roots of the front tibiæ; middle coxæ armed with spines; middle tibiæ with a large projecting tubercle on the lower part of the inner side. ♀. Very like ♂, but with simple legs and separated eyes.

Length, 7 mm. Very common.

Sp. 8.—H. CANICULARIS, L.

This very common species, so often seen upon our windows in the spring, is the *Musca domestica minor* of De Geer. It has the eyes in the ♂ subcontiguous; the antennæ and palpi black; the thorax dark bluish-grey, with three indistinct stripes; the abdomen dark grey, with the sides of the two or three anterior rings yellow, and the dorsum rather faintly marked with the usual triangular spots; calyptra and halteres pale; wings clear; legs black, with the knees and bases of front tibiæ slightly yellow; coxæ without spines; middle tibiæ simple. ♀. Similar to ♂; frontal space moderately wide, with stripe black; abdomen grey and immaculate.

Length, 5—7 mm.

Sp. 9.—H. ARMATA, Mgn.

♂. Eyes subcontiguous; frontal triangle large and black; antennæ and palpi black; thorax with scutellum black and unstriped; abdomen wide and short, dark grey, with the usual angular stripe; calyptra and halteres pale; wings grey; legs black, with the middle tibiæ much thickened towards the apex, and ciliated internally with long hairs; the middle metatarsus is armed at the base with a thick spine, made up of a fasciculus of four rigid hairs; the hind tibiæ are clothed along the whole of their inner surfaces with a row of longish hairs of even lengths. ♀. Quite black, with a wide frontal space and simple legs. Length, 5 mm. Common.

Sp. 10.—H. AERIA, Ztt.
carbonaria, Rnd.

This little black species has the eyes of the male contiguous, the antennæ black, rather long and thick, with arista bare and thickened at the base; palpi black; thorax deep black; abdomen short, wide, dark grey, and with the usual angulated stripe; calyptra and halteres black; wings fuscous; legs black, with the middle

tibiæ thickened towards the end, and shortly ciliated on their inner sides; middle metatarsus with a rigid spine like fasciculus of hairs near the base; hind tibiæ with only the ordinary bristles. I do not know the ♀, but it is said to be of a blackish-grey colour. Length, 3—4 mm. Not uncommon.

Sp. 11.—H. UMBROSA, Stein.

♂. Eyes closely coherent; thorax black-brown; abdomen blue-grey, with sub-distinct dorsal marks; calyptra brown, with unequal scales; halteres dark yellow; legs, with the spine at the base of the middle metatarsus, small; hind femora with a conspicuous row of bristles on the lower half of the under surface.

Length, 4—5 mm. Very rare; in Mr. Verrall's collection.

Sp. 12.—H. CORACINA, Lw.
spissata, Mde.*

♂. Eyes subcontiguous; arista bare; thorax with scutellum black, shining, and unstriped; abdomen depressed, grey, with glistening white reflections and the ordinary triangular dorsal marks; calyptra and halteres yellow; the scales of the former unequal; wings subnigrescent; legs black, with front knees testaceous; middle tibiæ abruptly thickened on their inner sides, about one-third from the lower end, forming a smooth tubercle; hind tibiæ slightly curved, somewhat thickened, furnished with a few long hairs on the middle surface, and a number of bristles of unequal length on the outer sides. ♀. Dark grey. Length, 5 mm. Very rare.

Sp. 13.—H. KOWARZII, Verr.†

♂. Eyes subcontiguous; thorax and scutellum dark grey and immaculate; abdomen grey, with a line of indistinct dorsal marks; calyptra and halteres pale; legs black, with yellow knees; middle tibiæ simple; hind femora with a prominent fasciculus of hairs at the extremity.

Length, 4—5 mm. Rare; in Mr. Verrall's collection.

Sp. 14.—H. VERRALLII, Stein.

♂. Eyes closely coherent; thorax black-brown and opaque; abdomen short and wide, dull brown, with indistinct triangular marks; calyptra brown, with equal scales; halteres dark yellow; wings brownish-yellow; legs black, with front knees yellow; middle tibiæ with the lower third a little thickened, and clothed with long hairs. Length, 3—4 mm. Very rare; in Mr. Verrall's collection.

Herr v. Stein says that this little species is very similar to *H. umbrosa*, but has no spine upon the middle metatarsus.

Sp. 15.—H. SOCIELLA, Ztt.
triangulifera, Mde.‡

♂. Eyes subcontiguous; thorax shining black, with shoulders and sides whitish; abdomen rather narrow and pointed, grey and glaucous; sometimes flavescent and

* Ent. Mo. Mag., Feb., 1882. † Ent. Mo. Mag., 1892 p. 149. ‡ Ent. Mo. Mag., 1887, p. 252.

translucent at the base, with a row of triangular marks which are not always quite distinct; calyptra with even scales, and, like the halteres, pale; wings fuscous; legs black, with the knees and bases of front femora yellow; middle femora armed beneath with a group of three or four strong spines; middle tibiæ gradually thickened a little towards the end, and ciliated with soft hairs; hind tibiæ without præapical setæ. ♀. Similar to ♂ in colour; thorax with sides strongly marked with white; abdomen brown, shining and immaculate. Length, 4—5 mm. Not uncommon.

Sp. 16.—H. SIMILIS, Stein.
sociella, Mde.*

This species closely resembles the former, but has the abdomen rather wider, with the triangular marks less distinct; the middle femora are without the central group of bristles, but have a long row of spines on their under surfaces; the hind tibiæ are furnished with præapical setæ. I do not know the ♀.

Length, 5 mm. Very rare.

Sp. 17.—H. PARVA, Stein.

This little black species closely resembles *H. aeria*, Ztt., but differs by the absence of the spine at the base of the middle metatarsus; the subanal processes are also furnished with two little shining appendages; the calyptra are brown or black, but the halteres are mostly yellow. Length, 3—4 mm. Very rare.

A single ♂ has been found in England by Mr. Verrall.

Sp. 18.—H. SERENA, Fln.

♂. Eyes subcontiguous; antennæ rather long; thorax with scutellum shining black; abdomen narrow, straight, blue-grey, sometimes a little yellow and translucent at the base, and marked with the usual triangular spots; calyptra and halteres dark yellow or fuscous; wings brown; legs black, with pale front knees: middle femora ciliated beneath with long hairs; middle tibiæ thickened a little along the lower halves, and ciliated with hairs, which become longer towards the apices; hind tibiæ simple. ♀. Entirely shining black, with calyptra and halteres yellow.

Length, 4 mm. Not common.

Sp. 19.—H. CORVINA, Verr.†

♂. Head semiglobular; eyes subcontiguous; antennæ black; thorax with scutellum blue-black and shining; abdomen narrow, elliptical, blue-black, with very indistinct triangular marks; anal segments small; calyptra pale, with unequal scales; halteres yellow; wings grey; legs black and simple, with few spines or hairs; there are two or three bristles on the outer sides of the middle tibiæ, which are gradually and slightly thickened, and furnished with short hairs on their inner sides, which become gradually longer towards the apex. ♀. Shining blue-black.

Length, 5 mm. Rare.

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* Ent. Mo. Mag., 1882, p. 204. † Ent. Mo. Mag., 1892, p. 149.

Sp. 20.—H. POLYCHÆTA, Lw., Stein.
lepida, Schin.

♂. Eyes subcontiguous; antennæ narrow; arista subnude, with the second joint slightly elongated, and the third thickened for nearly a third of its length; thorax with scutellum shining black; abdomen grey, variable in form, sometimes narrow as in *H. sociella*, and sometimes elliptical, marked with the usual triangular spots; calyptra with the scales decidedly unequal, and yellow like the halteres; wings flavous, and towards the end nigrescent; legs black, with the front knees red; middle tibiæ of nearly even thickness, and ciliated on the inner sides with hairs, which are very short above but become gradually longer towards the end, they have three or four bristles on the outer sides near the end. ♀. Very similar to the ♂; the middle tibiæ are armed with a strong bristle on the inner side.

Length, 4—5 mm. Rare.

Sp. 21.—H. GLAUCESCENS, Ztt.
herniosa, Rnd.

♂. Eyes approximate; thorax shining black; abdomen dark greenish-black with grey reflections, and an indistinct, wide, interrupted, dorsal stripe, subanal processes projecting in the form of a black tubercle; calyptra white; halteres yellow; wings yellowish-grey; legs black, middle tibiæ slightly thickened towards the end, and shortly but densely ciliated along the whole length. ♀. Dark greenish-black and shining; eyes moderately separated. Length, 4—5 mm. Rare.

Sp. 22.—H. INCISURATA, Ztt.
prostrata, Rnd.

This species is very similar in size and general appearance to *H. scalaris*, and the females of the two species can scarcely be distinguished from each other; the ♂, however, may at once be known from that of the latter by the absence of the tubercle on the middle tibiæ. The eyes of the ♂ are approximate; the thorax dark grey, with three or four subdistinct stripes; the abdomen is similar to that of *scalaris*; the legs are black, with yellow knees, the middle tibiæ are simple, and the middle coxæ are without spines. Length, 7 mm. Common.

Sp. 23.—H. MUTICA, Ztt.

♂. Eyes subcontiguous; antennæ rather large, the third joint quite double the length of the second; arista bare and thickened at the base; thorax black; abdomen rather wide, grey, with brown reflections and the usual angulated stripe; calyptra with unequal scales, which are either brown or yellow; halteres yellow; wings subnigrescent; legs quite black, middle tibiæ gradually thickened towards their extremities, and ciliated with short hairs on the thickened part; hind tibiæ slightly curved and furnished with a row of hairs of even and moderate lengths along the whole of their outer surfaces, as well as with a number of longish hairs in the middle of their inner sides. I no not know the ♀. Length, 5 mm. Not uncommon.

Sp. 24.—H. GENUALIS, Stein.

♂. Eyes subcontiguous; thorax black-grey, shining and unstriped; abdomen ovoid, with blue-grey reflections and rather indistinct angulated stripe; calyptra with scales unequal and, like the halteres, yellow; wings grey; legs black, with *all* the knees and bases of the tibiæ yellow; middle tibiæ simple; hind femora ciliated beneath, from the base to beyond the middle with rather long thickset bristles.

Length, 5 mm. Rare.

Genus XXI.—CŒLOMYIA, Hal.

HOMALOMYIA, p. Rnd.

Gen. ch.—Forehead and mouth a little prominent; eyes bare, only covering the upper two-thirds of the sides of the head; antennæ short; arista nude: abdomen in the ♂ depressed, with the second segment longer than the third, and obconical or spatulate, the base being narrower than the lower part; calyptra small, with subequal scales; wings and legs the same as in *Homalomyia*.

Sp. 1.—C. MOLLISSIMA, Hal.

spatulata, Ztt.

♂. Eyes subcontiguous; thorax black and unstriped; abdomen grey, marked with triangular spots in a similar manner to *H. scalaris*; calyptra nigrescent; halteres yellow; wings fuscous, with the anal and axillary veins directed as in the *Homalomyiæ*; legs black, with the middle femora thickened in the centre, and bearded beneath with strong hairs; middle tibiæ narrow at the base, gradually thickening towards the end, and ciliated with short hairs on the inner sides. ♀. Frontal space wide and grey, with a central stripe black behind and generally red in front; thorax grey and indistinctly striped; abdomen short, oval and pointed, of an uniform black-grey colour; wings yellowish; legs simple.

Length, 5 mm. ♂, 4 mm. ♀. Not common; local.

Genus XXII.—AZELIA, Dsv.

ATOMOGASTER, Mcq.

Gen. ch.—Head semiglobular; eyes large and bare; ocelli prominent; frontal bristles wanting in the male, and in a single row in the female; arista nude or subnude; abdomen narrow and conico-cylindrical, with four distinct segments, each of which is mostly marked with three spots, one central and elongated, and two lateral and round; wings, with the anal and auxillary veins, similar to those in *Homalomyia*; legs, with the hind tibiæ, generally bearded on one or the other side with long hairs.

The females have the abdomen subovoid, pointed, and marked with small spots; there are two small decussating seta in the frontal space.

1 (6) Halteres yellow, abdomen spotted.
2 (5) Hind tibiæ of ♂ with long hairs on both sides.........1. *Macquartii*, Stæg.
3 Hind tibiæ with long hairs on the inner sides only...2. *Zetterstedtii*, Rnd.
4 Hind tibiæ with long hairs on the outer sides only ....3. *cilipes*, Hal.
5 (2) Hind tibiæ without long hairs ....4. *triquetra*, Wdm.
6 (1) Halteres black.
7 (8) Abdomen spotted ....5. *gibbera*, Mgn.
8 (7) Abdomen unspotted ....6. *aterrima*, Mgn.

The species in this genus are pretty little velvety black flies, with narrow subcylindrical spotted bodies; they are rather sluggish in their movements, and most of them are not uncommon.

Sp. 1.—A. Macquartii, Stæg., Lw., Rnd.
triquetra, p. Mcq.

This is usually the largest species in the genus. The ♂ has the eyes large and closely contiguous; the thorax is of a dead velvety-black colour before the suture, and shining brown behind; the scutellum is black; the abdomen is dark grey and spotted in the usual manner; the calyptra are fuscous; the halteres yellow; wings nigrescent; legs black or brown, the front tibiæ being sometimes light brown at the base; the hind tibiæ are ciliated with long hairs on both sides, and the middle femora have a single long straight bristle in the middle of the under-side. ♀. Body grey, with small spots; wings clear; front tibiæ pale brown.

Length, ♂, 5 mm., ♀, 3—4 mm.

This is the most common species; the females are frequently found settling upon horse droppings in roads in woody places.

Sp. 2.—A. Zetterstedtii, Rnd., Lw.
triquetra, Fln., Zett.

This is usually the smallest species. It closely resembles the former, but has the long ciliæ of the hind tibiæ arranged in two rows upon the inner and anterior sides; the outer surface being bare; there are also two or three strong bristles on the under-surface of the middle femora. ♀. This is very similar to that of *A. Macquartii*, only rather smaller and paler in colour.

Length, ♂, 3 mm., ♀, 2½ mm. Not uncommon.

Sp. 3.—A. cilipes, Hal., Lw.
triquetra, p. Mcq.
Stægerii, Ztt., Schin., Rnd.

This is very similar to the two preceding species; the legs, however, are more piceous, the tibiæ being often testaceous; the beard upon the hind legs is longer and stronger than in either of the other species, and placed upon the outer (or rather hinder) sides of the tibiæ only; there is a single very long bristle projecting outwards a little before the end of the tibia below the beard.

Length, 4—5 mm. Not common.

Sp. 4.—A. TRIQUETRA, Wdm., Mgn., Lw., Rnd.
nudipes, Ztt.

This small species differs from the others by having the hind tibiæ destitute of long hairs. There is usually one long bristle on the under-side of the middle femora. In other respects it is very similar to all the preceding. ♀. I do not know any characters by which this may be distinguished from that of *A. Zetterstedtii*, to which it approaches in size. Length, 3 mm. Generally distributed.

Sp. 5.—A. GIBBERA, Ztt.

♂. Thorax deep black; abdomen dark grey, marked with rather large spots, which are arranged in the usual manner, but the lateral ones sometimes become confluent with the central one, when they form a wide subtriangular mark on each segment; the hind tibiæ are ciliated with long hairs on the under-sides, which are arranged in two rows.

Length, 2—3 mm. Rare; found by Mr. Verrall in Scotland.

Sp. 6.—A. ATERRIMA, Mgn.

This species differs essentially from all the others, being without the distinctive abdominal spots; it possesses, however, the other generic characters. It is quite black, with the exception of a narrow white seam on the hinder edge of each abdominal segment; both the calyptra and halteres are black; the wings are nigrescent; the legs are black, with the hind tibiæ simple; there is a single straight bristle on the under-side of the middle femora. Length, 3 mm. Very rare.

EYES WIDELY SEPARATED IN BOTH SEXES.

(CŒNOSINÆ).

Gen. XXIII.—LISPA, Ltr.

Gen. ch.—Eyes bare; remote in both sexes; frontal space without decussating setæ; arista plumose; palpi projecting, with the apices dilated (spoon-shaped); calyptra large, with very unequal scales; wings with the anal vein prolonged, but not reaching the margin.

1 (6) Palpi pale.
2 (3) Tibiæ black .... 1. *tentaculata*, Deg.
3 (2) Tibiæ yellow.
4 (5) Abdomen with dark tessellations .... 2. *uliginosa*, Fln.
5 (4) Abdomen with white spots .... 3. *pulchella*, Lw.
6 (1) Palpi black, or with the extremity only white.
7 (8) Hind metatarsus of male thick, and scarcely longer than the second joint of the tarsus .... 4. *crassiuscula*, Lw.
8 (7) Hind metatarsus of male not much thickened, and more than twice as long as the next joint .... 5. *litorea*, Fln.

Sp. 1.—L. TENTACULATA, Deg.

♂. Head greyish-yellow; frontal stripe brown and bifid; antennæ black; palpi

large, yellow, with a white shine; thorax with scutellum griseous, and indistinctly striped; abdomen brown, with four subtriangular white spots on each side, and a roundish central spot on the second and third segments, also white; calyptra white; halteres yellow; wings clear; legs black; front metatarsus shorter than the second joint, shortly ciliated beneath, and armed at the apex with a long spine; middle tarsal joints rufous, hind metatarsus ciliated beneath. ♀. Very similar to the ♂, but has front tarsi quite black, and of the ordinary form.

Length, 6 mm. Generally distributed, but not common.

Sp. 2.—L. ULIGINOSA, Fln.

Face white; frontal space brown; antennæ black; palpi rather less than those in *L. tentaculata*, and with a reddish tinge; thorax dark brown, indistinctly striped; abdomen oblong, subcylindrical, grey, with lateral subtrigonal, brown, subdistinct spots; calyptra white; halteres yellow; legs black, with testaceous tibiæ; tarsi simple. This is rather a doubtful British insect. Length, 6 mm.

Sp. 3.—L. PULCHELLA, Lw.

Face and sides of frontal space glistening white; median stripe black and bifid; antennæ black; palpi yellow; thorax light grey, with two wide lateral dark stripes; scutellum white; abdomen conico-cylindrical, metallic-brown, with three oblong white spots on each side, reaching to the ventral surface, which is white; there are also three round white spots down the centre, which alternate with the lateral ones; apex metallic-brown; calyptra white; halteres yellow; legs grey, with yellow tibiæ.

Length, 4—5 mm. Very rare; has been found by Mr. Verrall.

Sp. 4.—L. CRASSIUSCULA, Lw.

♂. Face bright yellow; frontal space with a black-brown stripe; antennæ black, with the apex of the second joint white; palpi black, with the extremity marked with white; thorax fuscous, with indistinct stripes; abdomen conico-cylindrical, dark grey, with indistinct dark spots; calyptra white; halteres dark yellow; legs black; middle femora thick; hind metatarsus thick, hairy, and scarcely longer than the second joint of the tarsus. ♀. Rather larger, and more distinctly spotted than the ♂. Length, 4—6 mm. Very rare.

Sp. 5.—L. LITOREA, Fln.

♂ and ♀. Fuscous; frontal space with a black bifid stripe; antennæ and palpi black; thorax indistinctly striped; abdomen depressed, dark grey, with black subtrigonal spots on the sides, and indistinct central dorsal marks; calyptra white; halteres with dark knobs; wings clear, with thickened veins; legs black; middle tibiæ very long; middle tarsi very short, with the first joint furnished at the base with a long bristle. Length, 5—6 mm. Rare.

Mr. Verrall records the capture of another species of *Lispa*, named *L. gemina* by H. v. d. Wulp, but I do not know it.

Gen. XXIV.—CARICEA, Dsv.

Gen. ch.—Eyes nude; remote in both sexes; frontal space with-

out decussating setæ; arista plumose or subplumose; calyptra of moderate size, with unequal scales; subanal appendages of the male thick, but not lobulated; tibiæ all armed at the ends with four or five large spines.

1 All the tibiæ as well as the ends of the femora rufous..............1. *tigrina*, F.
2 The four posterior tibiæ and front knees rufous ....2. *exsul*, Ztt.
3 The tibiæ only rufous ....3. *humilis*, Mgn.
4 The bases of the front tibiæ only rufous ....4. *sexmaculata*, Mgn.

Sp. 1.—C. TIGRINA, F.

♂. Frontal space grey, with black stripe; antennæ rather long, and with palpi black; arista with the hairs long at the base, but gradually shortened towards the apex; thorax light grey, indistinctly striped, but with four rows of dark brown bristle spots; abdomen grey, conico-cylindrical, with anal segments thick and incurved, but without projecting subanal lobes; the dorsum is marked with three longitudinal rows of spots, the lateral ones being round, and the central oblong; calyptra white; halteres yellow; wings clear, with the fourth and fifth longitudinal veins curved (or arched), and a little divergent at the end; legs with the tibiæ and apices of the femora rufous, and the tarsi with the basal three-fourths of the femora black; the front tibiæ have sometimes an oblong black patch in the middle; the hind tibiæ have a pair of strong median spines on the hind surface, besides the apical setæ. ♀. Similar to the ♂, but has the abdomen ovoid and pointed, and often without the median row of spots. Length, 5—6 mm. Very common.

Sp. 2.—C. EXSUL, Ztt.

♂. Forehead rather prominent; face white; frontal space only of moderate width, pale blue-grey and unstriped; antennæ short, black, with very short haired arista; thorax grey, with lighter sides, indistinctly striped, but marked with rows of bristle spots; abdomen grey, conico-cylindrical, and oblong, with anal segments small and not thickened, nor incurved; the dorsum is marked with four large brown lateral spots, two on the second and two on the third segment; there are also two very small spots on the fourth segment; calyptra white; halteres yellow; wings clear, with the longitudinal veins curved as in *C. tigrina*, and the cross veins slightly nebulous; legs with the posterior tibiæ and all the knees rufous; and the femora, tarsi, and front tibiæ (except the base) black. ♀. Similar to the ♂, but has the frontal space much wider, and the abdomen ovoid.
Length, 6—7 mm. Very rare; captured by Miss Prescott-Decie at Westward Ho.

Sp. 3.—C. HUMILIS, Mgn.

♂. Antennæ and palpi black; arista long and subplumose at the base; thorax grey, with indistinct stripes; abdomen subcylindrical, clubbed at the apex, and marked by three rows of spots, in a similar manner to *C. tigrina*; the legs are black, with the exception of the tibiæ, and sometimes the metatarsi, which are rufous. The ♀ closely resembles the ♂, except by the shape of the abdomen, which is more ovoid and pointed. Length, 3 mm. Not uncommon (rather local).

Sp. 4.—C. SEXMACULATA, Mgn.

This little species closely resembles the last, but differs by having the legs quite black, with the exception of the bases of the front tibiæ, which are testaceous.

Length, 3 mm. Rare.

Gen. XXV.—MACHORCHIS, Rnd.

CŒNOSIA, Mgn., Schin., &c.

Gen. ch.—Eyes bare; widely separated in both sexes; arista subplumose or pubescent; abdomen of male long, narrow, and subcylindrical, with large projecting ventral lobes; calyptra with unequal scales; wings with anal veins prolonged, but not reaching to the border; legs with the tibiæ armed with several spines at the apex.

1 (4) Abdomen immaculate.
2 (3) Legs for the most part pale.....................................1. *intermedia*, Fln.
3 (2) Legs for the greater part black.................................2. *means*, Mgn.
4 (1) Abdomen spotted..3. *meditata*, Fln.

Sp. 1.—M. INTERMEDIA, Fln.

♂. Face unprojecting, white; frontal space grey, with black bifid stripe; antennæ and palpi black; arista long and subplumose; thorax grey, with two rather indistinct brown stripes; abdomen grey and immaculate, long, subcylindrical, with black apex and large subanal appendages; calyptra and halteres pale; wings clear; legs testaceous, with the exception of the front femora, coxæ, and tarsi, which are black or grey; the pulvilli are large. ♀. Similar to ♂, but has the abdomen lanceolate and pointed, and sometimes the front femora pale.

Length, 5—7 mm. Not uncommon.

Sp. 2.—M. MEANS, Mgn.

This species is very similar in form in colour to *M. intermedia*, but is much smaller, and has the legs entirely black, with the exception of the knees and end of the coxæ, which are rufous. The ♀ is similar to the ♂, but has the abdomen ovate and pointed, and the tibiæ sometimes subtestaceous. Length, 4 mm. Rare.

Sp. 3.—M. MEDITATA, Fln.

♂. Frontal space grey, with black bifid stripe; antennæ narrow and black, with a white spot over the base; arista pubescent; thorax with scutellum grey and substriated; abdomen grey, subcylindrical, with incurved apex, very large, projecting, subanal processes, and four brown spots; calyptra white; halteres yellow; legs black, with the ends of the femora and tibiæ yellow. ♀. Rather larger than the ♂, and has the abdomen conical and acute. It strongly resembles the ♀ of *Caricea tigrina*, but has a pubescent instead of a plumose arista. Length, 4—5 mm. Rare.

Gen. XXVI.—MELANOCHELIA, Rnd.

LIMNOPHORA, Auct.

Gen. ch.—Eyes wide, and nearly equally wide apart in both sexes;

antennæ large and projecting forwards, with a bare arista; forehead and mouth prominent; palpi subclavate; calyptra well developed with unequal scales; wings with the inner cross vein opposite the end of the auxillary or second branch of the first longitudinal vein, and the anal vein not reaching the margin; legs with few spines.

The proper position of the species placed in this genus is difficult to determine. Haliday says,* "This fly will form the type of a genus allied to *Limnophora* and *Lispa*," but he did not form one. Schiner places it in the genus *Myopina*, together with *M. reflexa*, but that species has very small calyptra, and really belongs to the acalypterate *Muscidæ*. It differs from the species of *Limnophora* and *Spilogaster* by having the eyes equally wide apart in both sexes, as well as by other characters; so I think it better to place it by itself under the generic name originally suggested by Rondani.

Sp. 1.—M. riparia, Fln.

♂ and ♀. Antennæ black, long, and projecting; arista nude; face white; forehead and mouth prominent; frontal space white, with a bifid black stripe; palpi black; thorax glaucous-grey, with three wide, nearly confluent, brown stripes; scutellum grey, with sometimes two lateral brown spots; abdomen oval, glaucous-grey, with a broad dentated brown mark covering nearly the whole of the dorsum, which is sometimes divided by a narrow, longitudinal, central pale stripe; wings grey; legs glaucous-grey, with few spines or bristles. ♀. Rather larger and broader than the ♂. Length, 3—4 mm. Not uncommon in brooks and rivers.

Gen. XXVII.—CŒNOSIA, Mgn.

Gen. ch.—Eyes widely and almost equally separated in both sexes; arista pubescent or bare; forehead and mouth unprojecting; scales of calyptra small, but unequal; abdomen of male thickened and subcylindrical, and without large projecting appendages; legs simple.

1 (6) Legs black.
2 (5) Abdomen spotted.
3 (4) Thorax with three more or less confluent stripes ......1. *triangula*, Fln.
4 (3) Thorax with one central stripe ....2. *scrupulosa*, Ztt.
5 (2) Abdomen unspotted ....3. *agromyzella*, Rnd.
6 (1) Legs more or less yellow.
7 (13) Abdomen partly yellow.
8 (9) Palpi pale with dark tips (very small species).........4. *infantula*, Rnd.
9 (8) Palpi quite pale.
10(11)(12) Antennæ with all joints black or grey ....5. *elegantula*, Rnd.
11(10)(12) Antennæ with basal joints rufous ....6. *ungulata*, Rnd.

* Nat. Hist. Review, July, 1857, p. 195.

12(10)(11) Antennæ with all the joints pale ....7. *pallicornis*, Ztt.
13 (7) Abdomen grey.
14 (23) Abdomen spotted.
15 (20) Antennæ with all joints black or grey.
16 (17) Posterior femora and all the tibiæ pale ....8. *sexnotata*, Mgn.
17 (16) Hind femora with apex black.
18 (19) Tibiæ all pale ....9. *genualis*, Rnd.
19 (18) Posterior tibiæ more or less nigrescent ....10. *geniculata*, Fln.
20 (15) Antennæ with basal joints rufous.
21 (22) Wings clear ....11. *verna*, F.
22 (21) Wings partly nigrescent ....12. *pictipennis*, Lw.
23 (14) Abdomen unspotted...12. *pedella*, Ztt.

Sp. 1.—C. TRIANGULA, Fln.

♂. Face and epistome unprojecting; frontal space about equal in width in both sexes, grey, with a bifid (or *V*-shaped) stripe; antennæ and palpi black; arista subnude; thorax grey, with three broad brown stripes, which are often confluent, so that the disc looks uniformly brown, with grey sides; there are three post-sutural dorso-central bristles; scutellum immaculate; abdomen short, thick, and subcylindrical, with four large angular lateral spots; anal segments thick and incurved, but without any large ventral appendages; calyptra white, with unequal scales; halteres yellow; wings clear, with fourth and fifth long veins parallel, and outer cross veins straight and upright; legs black and simple. ♀. Very similar to ♂, but has the abdomen oval and pointed. Length, 3 mm. Not uncommon.

Sp. 2.—C. SCRUPULOSA, Ztt.

This species is very similar to the last, but is generally rather larger, with the abdomen more oblong. The thorax is grey, with a central, subdistinct, dorsal stripe, and has four post-sutural bristles; the wings have the fourth and fifth long veins slightly divergent. Length, 3—4 mm. Rare.

Sp. 3.—C. AGROMYZELLA, Rnd.

Frontal space black; antennæ and palpi black; the former long, the third joint being three or four times longer than the second; arista pubescent; thorax with scutellum and abdomen black and immaculate; calyptra and halteres pale; wings subfuscous, with fourth and fifth long veins decidedly divergent; legs black, with knees sometimes rufous. Length, 2 mm. Rare.

Sp. 4.—C. INFANTULA, Rnd.

♂. Head round; frontal space white, with a dark grey (sometimes partly luteous) central stripe; antennæ grey, with the third joint long; arista long and subnude; palpi small and inconspicuous, with dark ends; thorax with scutellum grey; abdomen narrow, laterally compressed yellow and translucent, with hinder segments black; the second and third segments are sometimes spotted, the apex is

thickened, but not lobulated; calyptra white; halteres yellow; wings with transverse veins rather near together; legs with the coxæ, femora, and tibiæ all pale, and tarsi more or less nigrescent. Length, 2 mm. Rare.

Sp. 5.—C. ELEGANTULA, Rnd.

This species has the thorax and abdomen of the same colour as the former, but it is larger, has the palpi long and quite pale; and the abdomen wider and flatter; the cross wing veins are also rather wider apart. Length, 4 mm. Rare.

Sp. 6.—C. UNGULATA, Rnd.

♂. Frontal stripe red in front; antennæ grey, with basal joints rufous; arista pubescent; palpi pale; thorax with scutellum grey and unstriped; abdomen with first and second segments yellow and translucent, and the third and fourth grey, with the hinder margins luteous; the dorsum it marked with an interrupted dark stripe, as well as with indistinct lateral spots; calyptra and halteres pale; wings clear, with the transverse veins nebulous; legs with the femora grey, and the tibiæ and tarsi entirely yellow, with the exception of the last joints of the latter, which are black. ♀. Very similar to ♂. Length, 3—4 mm. Very rare.

Sp. 7.—C. PALLICORNIS, Ztt.

Head white; frontal space wide, and red in front, with a bifid grey spot behind; antennæ narrow, yellow, with naked arista; palpi pale; thorax with scutellum pale grey and immaculate; abdomen oval, with the first two segments pale yellow and translucent; the succeeding segments grey; calyptra small, and with halteres white; wings clear, with the fourth and fifth long veins parallel; legs wholly yellow, with the femora rather thick. Length, 3 mm. Very rare.

Sp. 8.—C. SEXNOTATA, Mgn.

♂. Face white; frontal space grey, with a bifid black stripe; antennæ and palpi black; arista pubescent; thorax light grey, indistinctly striped; scutellum grey; abdomen grey, narrow, subcylindrical, with apex thickened and incurved and the dorsum marked with six brown lateral spots; calyptra and halteres pale; wings grey; legs, with the exception of the tarsi (which are black) yellow; the front femora are sometimes partly grey, especially in the females, which closely resemble the males, with the exception of the abdomen being oval and pointed.

Length, 4 mm. Common.

Sp. 9.—C. GENUALIS, Rnd.

This species closely resembles *C. sexnotata*, from which it principally differs by being smaller and having the hind femora blackened at the apex.

Length, 2 mm. Rare.

Sp. 10.—C. GENICULATA, Fln.

This is again very similar to both the preceding species. The thorax is grey, with two rather indistinct stripes; the abdomen is grey, with six lateral spots; the legs

have the front femora grey, and the middle and hind ones yellow, with black ends; the front tibiæ are yellow, but the posterior ones, as well as all the tarsi, are black.

Length, 3 mm. Rare.

Sp. 11.—C. VERNA, F.

This pretty species has the face white, the frontal space wide and grey, with a bifid black stripe; the antennæ are black, with the basal joints red and the arista pubescent; the palpi are pale; the thorax, with scutellum, is dark grey and indistinctly striped; the abdomen is oblong, subcylindrical in the male, with the apex thickened; grey, generally luteous and translucent at the base; marked with six lateral brown spots on the dorsum, as well as with a longitudinal central stripe; the hinder margins of the segments are also luteous; the calyptra are large and with the halteres yellow; the wings are grey; the legs have the femora all nigrescent, and the knees, tibiæ and tarsi testaceous; the hind tibiæ are sometimes piceous.

Length, 3 mm. Rare.

Sp. 12.—C. PICTIPENNIS, Lw.

Sapromyza costata ?, Mgn.
Orchisia costata, Rnd.

In this peculiar little species, which is very aberrant, the calyptra are so small that Meigen placed it among the acalyptrate *Muscidæ*. The ♂ has the face white; the frontal space luteous, with a small black bifid stripe; the antennæ pale yellow, with the third joint sometimes fuscous; arista subplumose; palpi pale; thorax light grey; abdomen narrow, with the apex thick, brownish-grey, with an indistinct dorsal stripe and four or six lateral brown spots, which are more distinct in the ♂ than the ♀; wings have the upper halves nigrescent, the apex being clear; legs entirely testaceous. ♀ has the abdomen pointed. Length, 3 mm. Very rare.

I received a pair from Mr. Dale, captured, I believe, in Dorsetshire.

Sp. 13.—C. PEDELLA, Ztt.

♂. Face white, frontal space grey, with a straight black stripe; antennæ and palpi black; arista nude; thorax grey and unstriped; abdomen fuscous, immaculate; wings clear, with the fourth and fifth long veins slightly divergent; legs with the femora and tarsi black, and the bases of the former with the knees and tibiæ testaceous. ♀. Very similar to the ♂. Length, 3 mm. Rare.

Gen. XXVIII.—ATHERIGONA, Rnd.

Gen. ch.—Eyes bare, remote in both sexes; forehead prominent; face oblique; antennæ with the third joint long; arista nude, with the second joint somewhat elongated, and sometimes geniculated with the third; calyptra with scales large and unequal; abdomen of male short, subcylindrical, and clubbed at the end; wings with the inner transverse veins placed near the base and opposite to the end of the first branch of the first longitudinal vein; anal vein prolonged, but not reaching the margin of the wing.

Sp. 1.—A. VARIA, Mgn.
quadripunctata, Rnd.

This peculiar little fly bears some resemblance to a *Tachinid* by the structure of the head and antennæ, and size of the calyptra. The ♂ has the frontal space yellow, with a red central straight stripe; the antennæ have the basal joints pale yellow, with the third one black, and five or six times as long as the second; the arista is bare, and thickened for half its length; palpi yellow; thorax grey, with shoulders and sides yellow; abdomen yellow, with six black lateral spots; anal segments incurved, but without lobular projections; calyptra and halteres pale; legs long, yellow, with brown tarsi. ♀. Abdomen more oval and pointed, and legs shorter than in the ♂. Length, 3 mm. Rare.

Gen. XXIX.—CHIROSIA, Rnd.
CŒNOSIA, Schin.

Gen. ch.—Eyes bare, remote in both sexes; arista pubescent; calyptra small, with equal sized scales; abdomen with apical segments thick and incurved; wings with anal vein prolonged to the margin.

Sp. 1.—C. ALBITARSIS, Ztt.
albimana, Rnd.

♂. Forehead rather prominent; frontal space with a straight black stripe; antennæ and palpi black, the former with the third joint rather thick; thorax with scutellum unstriped; abdomen narrow, straight, grey, with an indistinct dorsal stripe and small lobular subanal appendages; calyptra and halteres pale; wings subfuscous; legs black, with the three foremost joints of the front tarsi white. ♀. Abdomen conical and pointed; wings clear; front tarsi black.
Length, 2½ mm. Rare; found by Mr. Verrall in Scotland.

Gen. XXX.—HOPLOGASTER, Rnd.
CŒNOSIA, Mgn. and Schin., &c.

Gen. ch.—Eyes nude, widely and equally divided in both sexes; forehead flat; antennæ long; arista pubescent; wings with anal vein very short; calyptra with small and equal sized scales; abdomen of male with or without large subanal lobes and styles.

1 (2) Abdomen of ♂ with a long style .... 1. *mollicula*, Fln.
2 (1) Abdomen with apex thickened and without style ....2. *tricolor*, Ztt.

Sp. 1.—H. MOLLICULA, Fln.
nemoralis, Mgn., Macq.

♂. Face white; frontal space with a bifid black stripe; antennæ with basal joints grey; the apex of the second joint and the third being yellow; arista long and pubescent; palpi pale; thorax blue-grey and indistinctly striped; scutellum grey; abdomen oblong, subcylindrical, yellow and translucent, with the apex more

or less blackened, incurved, and furnished with large, hairy, pale, flattened processes; the dorsum is marked upon the third segment with two indistinct lateral brown spots; calyptra and halteres pale; wings clear; legs entirely yellow. ♀. Third joint of the antennæ fuscous; abdomen narrow and pointed; legs with tarsi black.

Length, 4 mm. Common.

Sp. 2.—H. TRICOLOR, Ztt.

♂. Face white; frontal space with sides white, and a bifid dark stripe in the centre; antennæ black or grey; arista pubescent; thorax grey, with indistinct stripes; abdomen narrow, compressed, with first and second segments yellow and the others nigrescent, the former are each marked on the dorsum with two linear dark spots, placed near together; the apex is thick and incurved, with two large lobular appendages, but without the flat lamellæ of the former species; calyptra and halteres pale; wings clear; legs pale yellow, with black tarsi. ♀. Rather larger than the ♂; abdomen thick and pointed, without spots.

Length, 3—4 mm. Very rare.

Gen. XXXI.—CHELISIA, Rnd.

Cœnosia, Mgn., Schin.

Gen. ch.—Eyes nude, remote in both sexes; arista subplumose; calyptra with small and equal sized scales; abdomen with subanal lobes; wings with anal vein prolonged, but not reaching the margin.

This genus chiefly differs from the former by the structure of the anal veins of the wings, which are somewhat elongated, while in *Hoplogaster* they are so short as to be almost rudimentary.

Sp. 1.—C. MONILIS, Mgn.

umbripennis, Ztt.

♂. Forehead slightly prominent; frontal space wide, with white margins and dark grey central stripe, with rufous front; antennæ black, rather long and straight; arista pubescent, with thickened base; palpi black; thorax grey, with a pale brown central stripe; scutellum grey; abdomen subcylindrical, grey, with an indistinct dark central dorsal stripe; anal segments thick and round, with two small blunt lobes; calyptra small, and with halteres pale; wings brunescent, with pale roots; legs black and simple. ♀. Very similar to ♂, but has the abdomen with a pointed apex.

Length, 2—3 mm. Very rare.

Gen. XXXII.—SCHŒNOMYZA, Hal.

Ochtiphila, Fln., Mgn.

Sciomyza, p. Mgn.

Gen. ch.—Eyes bare, widely separated in both sexes; antennæ suberect, approximate at their bases and divergent at their extremities; third joint thick, with apex pointed on the upper side; arista bare;

mouth with a single vibrissa on each side; calyptra with very small and equal scales; wings with the first longitudinal vein very short and the anal vein much abbreviated.

Sp. 1.—S. LITORELLA, Fln.

♂. Face golden-yellow; frontal space black behind, and marked in front with two large shining white spots; antennæ black, with white reflections; thorax grey, and indistinctly striped; abdomen grey, ovoid, with apex flat, and marked with transverse brown fasciæ; calyptra and halteres pale; wings clear, with transverse veins slightly nebulous; legs black or grey. ♀. Face white; frontal space grey.

Length, 2 mm. Rare.

I received a specimen from Mr. W. H. Harris, of Cardiff, in 1886.

The late Mr. Haliday recorded the capture of another species, viz., *S. fasciata*, Mgn., in Ireland, which has three shining black fasciæ on the abdomen, but I have not seen an example.

Bradford: *May*, 1897.

ERRORS AND OMISSIONS (PART I).

Page 12— HYETODESIA VAGANS, Fln.

I remarked concerning this species that I had not seen an English example. This was a careless error, for I had quite forgotten that Mr. Ralph Bradley, of Sutton Coldfield, sent me three well marked specimens of this fly (one male and two females) in October last for my inspection which he had taken in that neighbourhood. I regret that I did not before record this interesting capture.

Page 4—for "ALLOCOSSTYLUS," read "ALLOEOSTYLUS."

„ 18 and 21—for "*fragripes*," read "*flagripes*."

„ 28—for "*glabricola*," read "*glabricula*."

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